ONTARIO TEACHERS' MANUALS

HISTORY OF EDUCATION

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HISTORY OF EDUCATION

CHAPTER I

INTRODUCTION

THE history of Education is a part, and a very important part, of the history of civilization, but civilization is so general and, withal, so important a term that it may be well to make at the outset some inquiry as to just what it means.

The term "civilization" implies, among other things, the attainment of a certain degree of mastery over the forces of nature. The so-called civilized man obtains heat and light and food and shelter in ways which outwardly at least, differ greatly from the ways employed by the savage. He speaks a more highly developed language, and uses the written and the printed word as an aid to speech. Moreover, at the basis of his practical use of these arts and conveniences is an immense amount of theory as to the forces of nature involved, and as to the meaning and value of life itself. To this theory, as organized into systems and verified by experience, we give the names science and philosophy.

But all this material and spiritual wealth is of value only as it is connected vitally with the experiences of living men and women. Each succeeding generation possesses it only as it understands and administers it, and all that the passing generation can do for its successors is to make this understanding and administration as easy and as sure as possible. This, however, is an immense

and a difficult task, and repeated failure, sometimes on a colossal scale, has shown that only through concerted and intelligent effort is even an approximate success possible. Human society has had not one but many dark ages, and these have resulted sometimes from the fact that mankind had been pursuing a wrong road which had to be retraced, and sometimes from the fact that through some great catastrophe (a barbarian invasion or a prolonged civil war, for instance), the mature generation could not pass on to its immediate successor the wealth of knowledge and skill which it possessed.

THE SCHOOL AS AN HISTORIC INSTITUTION

The concerted effort through which the ever increasing riches of civilization have been made the sure possession of each succeeding generation has come to be definitely associated at the present time with the institution known as "the school." Historically, the school is comparatively a young institution. For many centuries formal education was the work of the Church, and even at the present day the Church exercises a large and important educational function. If we go farther back, we find certain formal attempts at instruction associated with family and community life. Out of these, as an organism from a germ, the many-sided and all-pervasive educational effort of the present day has developed.

While the term "History of Education" has for many writers a much wider meaning, we shall in the present work concern ourselves mainly with an account of the school as an historic institution, and with an effort to show how the educational practices and ideals of the present day are connected with those which satisfied the needs or, at least, the aspirations of the centuries into whose inheritance we have entered.

SCOPE OF THE HISTORY OF EDUCATION

Even with this limitation of the scope of the term "education" to formal education, we shall find that our task is not entirely a simple one. One might describe the schools and teachers and studies of a period with entire faithfulness and yet leave the picture incomplete. There would be needed the back-ground of family life, of social custom, of religious belief and observance, and of governmental policy, which in every age has given the school its peculiar significance for that age. Then alongside of educational practice there has been educational theory. Sometimes the two have intermingled; the theorist has been the practical educator as well. More often, however, he has woven his fabric of theory with little reference to the actual practice of his day, and with little or no thought of an attempt to give his projected reforms bodily shape. Notwithstanding this fact, such writings as Plato's *Republic* and Bacon's *New Atlantis* are of decided interest to the teacher, if only because of the striking character of the educational schemes which they set forth. But the theoretical reformer in education is never wholly removed from the life of his time. He reflects, though sometimes unconsciously, the spirit of his age, and it is that age, too, which gives him his problems, however unwilling it may be to accept the solution which he finally offers.

It will be seen then that the task of the writer of the history of education is threefold. He must exhibit, first, the actual school life of the period with which he deals. In the second place, he must outline the social back-ground, that is, he must show how the home life, the religious life, and the political life of the period gave to the school certain peculiar tasks, and, it may be also, certain characteristics. And thirdly, he must estimate

the contribution which the great thinkers of that period made to the solution of certain momentous questions, which, while they may seem to be the special concern of the teacher, are, after all, closely related to the great questions of human life and destiny.

ITS VALUE TO THE TEACHER

In conclusion one may ask: "Of what value to the ordinary teacher is the study of such problems as those just outlined?" This question would, perhaps, be more appropriate for a closing than for an opening chapter, and yet we may answer it in a tentative way at the outset.

There are two vices to which the teaching profession is especially prone, or, to state the matter more mildly, there are two disabilities under which the teacher perpetually labours. The first is the tendency to regard his work as a something apart from the pursuits of other persons. His influence upon the life of his time is so indirect that he often fails to think of himself as a necessary and, potentially, an influential factor in determining the direction and the strength of social movements. The isolation of the teacher from his fellow-men and women is but one aspect of the general isolation of school life from community life—an isolation which, by the way, is fast diminishing in the face of an increased sense of public duty on the part of the teacher and a deeper recognition on the part of most thinking people of the meaning and scope of modern education.

The second disability arises from the isolation of the teacher in point of time. The calling of the teacher is, comparatively speaking, far from rich in traditions, and those traditions which are most current at the present day are not all an inspiration to high endeavour and to a pardonable professional pride. In fact, only in recent

years has teaching been spoken about and written about as a profession, and even the kindliest critic would hesitate to attribute to teachers, as a class, an intelligent knowledge of historic movements in which professional educators have played an honourable part, and of the contribution which formal education has made and is making to the evolution of society. Without such a knowledge a true professional status will be impossible, and the traditional imprisonment of the teacher within the four walls of the school-room will but typify the narrowness of his interests and the meagreness of his achievements.

PLAN OF THIS BOOK

A few words may be added to the plan of the present work. The customary divisions of the subject have, in the main, been observed, and are as follows:

1. Primitive Education—being a description of those customs among savage peoples which are regarded as having an educational significance.

2. Oriental Education—being an account of the educational theories and practices of such typical oriental peoples as the Ancient Egyptians, the Chinese, the Hindoos, the Ancient Hebrews, etc.

3. Ancient, or Classical, Education—dealing, as the name implies, with Greece and Rome, and giving especial emphasis to the educational theories of the classical writers.

4. Mediæval Education—beginning with the chaos introduced by the barbarian invasions and showing how, mainly through the efforts of the Christian Church, the basis of modern civilization was slowly built up.

5. Modern Education—starting with the Renaissance and continuing to the present time.

The modern period contains two well-marked subdivisions: first, those centuries during which the Renaissance ideal was paramount, and effort was centred upon the recovery of the intellectual treasures of antiquity and the adaptation of classical training and culture to the needs of the modern world; and second, the modern period proper, beginning, roughly speaking, with the middle of the eighteenth century. In dealing with this period it will be necessary to show how modern science and modern democracy are influencing and are, in turn, being influenced by the modern school.

The importance of this latter subdivision for the teacher is so manifest that it has seemed desirable to devote to it fully one half of the book.

CHAPTER II

PRIMITIVE EDUCATION

It has been estimated that, if the length of the life of the race upon this planet were represented by a line a yard in length, that period of which we have any written history would occupy a space of considerably less than one inch. It may safely be assumed, then, that formal education existed long before the beginnings of history. It does not seem possible that the race should have reached the stage of advancement which is exhibited by the records discovered in the Nile and the Euphrates valleys, without some definite means for the training and instructing of the youth. Where and how education of a formal sort began it is idle to inquire, but anthropologists assure us that, long before the time of Egypt and Babylonia, there existed well developed agencies for preserving and transmitting the social inheritance. One argument in favour of this contention is worthy of note. There are found, at the present time, in various parts of the globe, savage peoples whose natural environment and whose domestic and social habits are markedly similar to those of our prehistoric ancestors. Among these peoples are found certain practices which, without any undue extension of the term education, may be said to possess an educational value and to have an educational aim. These peoples exist in what may be called a stage of "arrested" social development. They remain still upon the plane which our primitive ancestors once occupied. A brief survey of certain of their customs is therefore valuable, both as a starting-point, and as a revelation of certain fundamental aspects of the problem we are studying.

ITS BASIS

At the basis of primitive education are certain universal human instincts: notably the parental instinct leading to the more or less continuous and prolonged care of offspring; the social instinct which prompts to a regard for the welfare of the group as distinguished from the welfare of the individual, and the instinct of imitation which makes possible the acquisition by the young of whatever culture and skill the adult members of the group possess. These instincts are, in fact, characteristic of all the higher animals, and it is partly because of his large endowment with these traits that man has gradually risen above the level of the brute. But it is only when instinct, at first blind and unconscious, is irradiated and transformed by consciousness that it has any significance for the history of education. It is a truism of the present day that there can be no genuine education without the conscious co-operation of the one to be educated. It is because of this fact that a well-known writer, Thomas Davidson, speaks of education as the *conscious* evolution of the race.

ITS ECONOMIC ELEMENT

Among all peoples the first necessity in point of time has been the securing of the physical necessities of life. It is hardly possible that, in providing for this necessity, savage man has ever been able to dispense with the use of tools. The definition of man as a "tool-using animal" is well known. Certain of these tools are of the nature of weapons for use in war and in the chase; others belong to the arts of peace. The war-club made by fastening a round stone into the fork of a cleft stick by means of rawhide thongs, and the sharpened flint used in removing the skins of animals, are tools, just as truly as are the repeat-

ing rifle and the safety razor of the civilized man. Moreover, both in their manufacture and in their use a certain amount of conscious imitation and a certain measure of instruction are necessary. In the case of savage tribes of the present day, the instructors are, in the main, the old men and women of the tribe. Hunting and warfare, regarded as more worthy pursuits, are the occupation of the younger and more vigorous men. The spirit which prompted this division of labour has, as we all know, not wholly died out among civilized peoples. Teaching has never been generally regarded as deserving a place among the more honourable occupations of mankind.

ITS SPIRITUAL ELEMENT

While the daily necessity of food, clothing, shelter, and protection from enemies brought home to primitive man the need of practical skill and called for a certain limited education of a practical sort, the spiritual necessities of his daily life were to him equally important. This statement may sound strange to those who think that, since the religious beliefs and observances of savages bear little or no outward resemblance to those of civilized man, they do not deserve the name "religious" at all. Yet the behaviour of our primitive ancestors and of savage peoples of the present day was and is dominated by an overwhelming belief in a spirit world and in spiritual agencies. For them man has not only one soul, but several. This was thought to be true also of the higher animals and even of plants. And each soul possessed a certain function and a certain power. Because of this general attitude a crude theory as to the nature of souls was sure to arise, and a demand for a ceremonial observance which ensured the safety of the individual in the presence of a host of spiritual agencies, some of whom were friendly, some hostile, and all of

whom needed to be treated with due circumspection. To the multitude of beliefs which grew out of this general attitude, anthropologists have given the name "animism," although the name "spiritualism" would be more expressive and also more serviceable, were it not for the fact that the term has already a special meaning in the popular mind.

Among savage peoples of the present day, the spiritual welfare of the group or tribe is the special responsibility of certain experts, as it were, of whom the "medicine man" of the North American Indian, is, perhaps, the most familiar example; and these experts have, in consequence, special duties to perform, and constitute, as a rule, a class rigidly separated from their fellows.

ITS CEREMONIAL ELEMENT

While the medicine man, or shaman, or priest, is supposed to possess an inner knowledge peculiar to his class and his rank, there still is need of some positive instruction of the ordinary member of the tribe in those observances, neglect of which may bring disaster not only upon himself but upon the whole tribe. Significantly enough, the time most frequently chosen for this instruction is the period of transition from childhood to maturity, a period marked by rapid physical development, and characterized also by a mental and emotional impressionableness which makes the youth particularly susceptible to the counsels of his elders, especially when these counsels are reinforced by fasting and physical suffering—as they often are—and by a ceremony and ritual, which, while it appears to us as mere hocus-pocus, is to the savage mind filled with the most solemn significance. These initiatory rites sometimes last for months, and involve not only the performance of certain occult ceremonies, but also a measure of instruction in

the traditions and practices of the tribe; and their completion marks the admission of the novice into privileges hitherto denied him.

While extensive illustration is in the present circumstances impossible, a few references to these initiatory ceremonies as they are described by a contemporary writer may make the foregoing general statements more clear.

> The instructions received by the candidates during their initiatory seclusion covers a wide range of topics. Among the Australians it is at this period that the very complicated class and totemic divisions on which the marriage system rests are brought to the attention of the novices. During their stay in the bush, that is, during their initiation, Port Stephen boys are "taught the sacred songs of the tribe and the laws relating to the class system." . . . Kurnai boys, after initiation, spend months in the bush as probationers under the charge of their guardians, gaining their own living, learning lessons of self-control, and being instructed in the manly duties of the Kurnai, until the old men are satisfied that they are sufficiently broken into obedience and may be trusted to return to the community. . . .
>
> Among the Gulf Papuans, the course of instruction in the Kwod, or men's house, forms one long training in tribal custom. The old man who resides with the novices as instructor teaches them the complicated system of Taboo: the season when certain kinds of fish may not be eaten, or when certain foods are reserved for future use. Much attention is paid to the art of sorcery, not to make them sorcerers, but to impress on their minds how great is the art of sorcerers.

Vey* girls go into the "gree-gree bush" when ten years old, and even earlier, and remain there under charge of instructors, who are the oldest women in the village, until of marriageable age. Various womanly duties—the care of children, cooking, the making of nets—besides dancing, games, and songs, are taught them. Nor does this training in seclusion omit those darker rites which seem to be its almost invariable accompaniment, especially among African peoples.

SUMMARY

Such illustrations as the foregoing enforce the fact that the special instruction during the initiation period possesses at least three distinct characteristics. First, it has an economic aspect, in that it gives the youth command of certain practical arts, such as fishing, net-making, cooking, etc. Secondly, it has a social value, in that it inculcates in the youth an ability and a desire to conform to the laws and customs of the tribe. Thirdly, it possesses a religious significance, in that it aims to prepare the youth for survival in a constant environment of spiritual agencies. Thus we find in germ the three fundamental elements of all genuine education. The succeeding Chapters will but serve to show how these three factors have operated during the many centuries of progressive civilization which have elapsed since the time of our primitive ancestors.

NOTE: The subject of Animism is treated at great length in Tylor, *Primitive Culture.* Initiation and kindred ceremonies among savage peoples of the present time are described with a wealth of detail in Webster, *Primitive Secret Societies* (The Macmillan Co., New York, 1908). The quotations in the foregoing are from Chapters III and IV of this work.

* A tribe in Liberia, Africa

CHAPTER III

ORIENTAL EDUCATION

Characteristics of Oriental Civilization

If we were asked to tell the differences between Asiatic peoples, such as the Chinese and the Ancient Egyptians, and Western peoples, such as the English and the French, we would doubtless point, in the first place, to a certain docile obedience to authority characteristic of the former, and, in the second place, to a deep-rooted aversion to change which gives their various social institutions a stability—whether for good or evil—that is unknown in the Western world. It is this last fact which imparts to their educational systems certain common characteristics, and justifies us in treating, in the same Chapter and under the same heading, of peoples who are absolutely unrelated, either historically or geographically.

The essential features of Oriental education can best be exhibited in the present connection by a brief description of the educational practices of the Ancient Egyptians, the Ancient Hebrews, and the Chinese.

THE ANCIENT EGYPTIANS

PHYSICAL AND SOCIAL CONDITIONS

Ancient Egypt was inclosed on all sides by natural barriers—by desert, or mountain, or sea. The annual overflow of the Nile gave exceptional fertility to the soil and provided employment and support for a large population. It is not to be wondered at that under such conditions there developed very early a civilization of a distinctive type. The beginnings of this civilization

took place, according to the general estimate, more than four thousand years before Christ. There were, during the millenia which followed, many changes of dynasty and several invasions by foreign powers, but changes in the social order and in the life of the common people seem to have been few. There was always a large class bound to the soil whose lives were passed in a drudgery which was unrewarded, except with the bare necessaries of life. An easy-going and submissive disposition, however, blunted the edge of tyranny; and the warmth of the climate and the fertility of the soil prevented those hardships which accompany poverty in more northern countries.

Above the peasant class were the soldiers, who received grants of land as part payment for their services, and who, during periods of peace, were little more than tillers of the soil. They were, however, exempt from taxation and from forced labour during the time they were upon active service.

THE SCRIBE

The most interesting class of all, so far as our present purpose is concerned, is that of the scribes. In a broad sense every one who possessed the rudiments of an education was a scribe, and, in this meaning of the term, the priests, the nobles, even the king himself, were scribes. But in the narrower use of the term, the scribes were the official class—the mainspring of the whole administrative machinery.

> There was no public school in which the scribe could be prepared for his future career; but as soon as the child had acquired the first rudiments of letters with some old pedagogue, he was taken into his father's office, or intrusted to some friend who agreed to undertake his education. The apprentice noted what went on about him, imitated the modes of procedure of the

employees, copied in his spare time old papers, letters, bills, flowery-worded petitions, reports, complimentary addresses to his superiors, or to the Pharaoh, all of which his patron examined and corrected, noting on the margin letters or words imperfectly written, improving the style, and recasting or completing the incorrect expressions.

After passing through various grades of apprenticeship a place was found for the youth on the lowest rung of the official ladder. Though the life of the ordinary scribe was lived within a very narrow circle and consisted of the performance of very humdrum duties, energy and ability might carry the ambitious youth far. "The son of a peasant or some poor wretch, who had begun life by keeping a register of the bread and vegetables in some provincial government office, had been known to crown his long and successful career by a sort of vice-regency over the half of Egypt."

The important facts to be noticed about the training of the scribe are: first, that it was almost wholly a matter of imitation, certain prescribed arts and forms being mastered in all their minutiæ by almost endless repetition; and, second, that the method of literary composition created and fostered by such a system was highly artificial; for since only set phrases and forms of address were permitted, all tendency to originality, and hence to improvement, was suppressed. As to the discipline which accompanied the education of the scribe, it was doubtless arbitrary and severe, as school discipline must necessarily be in societies where the preservation of the old in an unchanged form is regarded as the chief aim of education. A very expressive summary of the belief of the Ancient Egyptians in the efficiency of the rod is found in the maxim: "A boy's ears are in his back and he hearkens when he is beaten."

THE PRIEST

The priestly class was very numerous and very powerful. Approximately one-third of the land was in their possession. The king was, in theory, the chief priest of all of the many gods of the realm, and each feudal noble was a priest of the god of his particular locality. Of necessity, however, the performance of the actual priestly functions, such as the offering of sacrifice or the interpretation of the will of the god, fell to a certain special class. While membership in the priestly class was not hereditary in theory, it became so in practice through the natural desire of fathers to establish their sons in the privileges and emoluments of the favoured group to which they themselves belonged.

The training of the priests was largely a schooling in the elaborate and intricate forms through which the favour of the various gods might be secured. Religion was conceived to be of the nature of a legal contract; the god was bound to do his part only when every stipulated condition had been fully and faithfully met both by the worshipper and by the priest who acted on his behalf. Hence arose the need not only for a conscientious, but also for a skilful, performance of the priestly function.

> The formulas accompanying each act of the sacrificial priest contained a certain number of words whose due sequence and harmonies might not suffer the slightest modification whatever, even from the god himself, under penalty of losing their efficacy—one false note, a single discord between the succession of gestures and the utterance of the sacramental words, any hesitation, any awkwardness in the accomplishment of a rite, and the sacrifice was vain.

PRACTICAL CHARACTER OF THE EGYPTIANS

To what has already been said about the general characteristics of Egyptian education the following observations may be added:

The feudal organization of the government tended to confirm and continue class privileges. While in theory the son of the poor man might make his merits felt and rise to distinction, in practice this was extremely difficult.

The Egyptian character was of an exceedingly practical sort, and this practical view, as has been seen, touched even their religion. Certain sciences, such as mathematics, architecture, and medicine, received considerable development among them, but this development was due to practical need, not to any necessity of finding an outlet for speculative genius. Their arithmetic was closely related to affairs of the counting-house, their geometry was such as was necessary for the re-establishment of landmarks obliterated by the annual overflow of the Nile, and their medicine consisted chiefly of a description of various bodily disorders, and the prescription of such remedies as had apparently been justified by experience. Such a maxim as "Art for Art's sake," or the disinterested pursuit of a specialty through pure love of the truth which that pursuit might reveal, was unknown to them. It remained for the Greeks to add to these sciences the elements of imagination and reason, and it is through the Greeks that the Egyptian learning has been made available for modern peoples.

When once a civilization sufficient for practical needs had been established among the Egyptians, progress may be said to have ceased. Each succeeding generation was content to adopt the customs and to utilize the intel-

lectual achievements of its predecessors. It is this fact which has led a recent writer upon the history of Ancient Egypt to remark:

> At the end of her career, when the nation had lost all of the youthful activity and creative energy which so abounded in the Old Kingdom, the sole effort of her priests and wise men was to restore the unsullied religion which, in their fond imagination, had existed in the Old Kingdom.

HEBREW EDUCATION

ITS DIVISIONS

Hebrew Education may be divided into four periods, three of which fall within the general period of Old Testament history, and the fourth of which belongs to the early centuries of the Christian Era.

The first period extends from the emigration from Egypt to the beginning of the Kingship, covering a space of some five hundred years; the second extends from the establishment of the Kingship to the end of the Babylonian Captivity, another five hundred years or so; and the third closes with the beginning of the Christian Era. These divisions are, of course, very general in their character, but they serve to indicate very real differences in educational agencies and practices.

FIRST PERIOD: MOSAIC LEGISLATION

As is well known, the one thing which gave to Hebrew history its unique character was the conception of one God, Jehovah, who was the peculiar deity of the Hebrew people, and whose authority was supreme in civil as well as in religious affairs. Beginning with

Moses, there was a very clear notion of a moral and a ceremonial law which, because of its origin, was regarded as of absolute authority. The Mosaic legislation, whatever the form it took during this early period, was clearly a means of welding the scattered tribes together; and the official ministers and interpreters of this legislation, the priests and the Levites, represented in an especial way the religious unity of the whole people. Their chief concern, however, was with the ceremonial aspects of religion; the moral and patriotic aspects were left largely to another class, the prophets. While this group belongs, in the main, to the second of our periods, there were two outstanding representatives of the prophetic class during the first period—Moses at the beginning and Samuel at the end. They owed their position as leaders to their own outstanding gifts and to the popular belief that they were, in an especial sense, the agents of Jehovah.

Just how much of educational activity, in the narrower sense of the term, characterized this first period it is difficult, if not impossible, to state. In all probability it was largely confined to the household, and, so far as the more general and spiritual elements were concerned, it was a matter of oral tradition. Certain patriotic songs are preserved in the earlier books of the Old Testament which seem to have been widely known and used as a means of developing youthful patriotism and of reminding the people of notable exploits and deliverances in the national history. The arts of reading and writing were doubtless known, but, among a nomadic and warlike people such as were the Hebrews at this time, they would not be very generally practised.

SECOND PERIOD: AGRICULTURE AND COMMERCE

GROWTH OF PROPHETIC CLASS

With the establishment of the Kingship, shortly before 1000 B.C., the Hebrews settled down to agricultural pursuits. Later, trade and commerce were greatly enlarged, with the corresponding development of a special commercial class, and the inevitable introduction of certain elements from the neighbouring civilizations. The domestic and agricultural arts were of course known and practised, but all instruction in them was of the practical sort and involved a large measure of imitation. The priests and Levites continued to be the official religious leaders. Most significant, from the broadly educational view-point, is the growth of the prophetic class during this period. The prophet was pre-eminently a teacher of personal and civic righteousness, and his mission was, in the case of the greater prophets, one of protest against moral laxity and national apostasy from the true worship of Jehovah. Although not an official class, the prophets were the great teachers of their time. The practice among the later prophets of committing the prophetic message to writing is strong evidence of the growth of a reading class; and the high ethical tone, the keen social insight, and the genuine poetic quality, which are the predominant characteristics of the greater prophetic writings, gave them a unique influence upon the later Hebrew history and upon the ensuing Christian civilization.

Of the so-called "Schools" of the prophets, of which frequent mention is made in certain of the historical books of the Old Testament, we know but little. They were fraternities, it would seem, rather than schools. Music was certainly taught in them, and there is little

doubt that they were also repositories of national traditions, and a valuable means of preserving and developing an historical literature. They served also to keep alive the religious fervour of which the prophetic class were the especial custodians.

THIRD PERIOD: THE SCRIBES

After the return of the Jews from exile—537 B.C., onward—a new class assumed a position of national leadership. These were the Scribes—men learned in the Mosaic Law, and skilled in its interpretation and in its application to the affairs of ordinary life. Certain eminent members of this class gathered around them groups of pupils to whom they gave instruction of a formal kind. The headquarters of this instruction was in the Temple at Jerusalem. Of the method of teaching pursued the following description has been given:

> The instruction was oral and disputatory. The teacher asked how must it be done (or determined) in this or that case, and the scholars had to answer. The great aim was to memorize and to reproduce literally what was taught. The pupil, as was the general Oriental practice, hung on the lips of his master. All this presumed a prior elementary instruction, but this must have been, largely, domestic in its character, for there is no evidence of the existence of elementary schools.

THE SYNAGOGUE

Much was done in a general way for the education of the common people by the establishment of synagogues. These, as is well known, were places of weekly meeting where the Law was read and expounded, and where prayer and praise were offered. By the second century before Christ there were synagogues in all the towns and

villages. Of the influence of these institutions, a distinguished German scholar has written, "The Bible became the spelling-book, the community a school, religion an affair of teaching and learning. Piety and education were inseparable. Whoever could not read was no true Jew."

FOURTH PERIOD: COMPULSORY EDUCATION

LEARNING A TRADE

Shortly after the beginning of the Christian Era elementary education became compulsory. One teacher was to be employed where there were twenty-five children, an assistant where the number exceeded forty; and two assistants where the number exceeded fifty. Attendance was compulsory, and the course of study was as follows: from the sixth to the tenth years the Law was studied along with writing and arithmetic; from the tenth to the fifteenth years that portion of the Talmud (a commentary upon the Law) known as the Mishnah, was the subject of instruction; and, after the fifteenth year, a further portion (known as the Gemara). Together with the literary instruction provided by the schools, each father was expected to see that his son learned a trade, and the general attitude of the Jewish people in this particular is shown in a familiar proverb to the effect that he who disregarded this injunction made his son a thief.

DISCIPLINE

The general character of Ancient Jewish education has been indicated with a fair degree of completeness in the foregoing. The methods of discipline were severe, as is well attested by the many passages in the Book of Proverbs which refer to the use of the rod, such as the

following: "He that spareth the rod hateth his son"; "Foolishness is bound up in the heart of a child, but the rod of correction shall drive it far from him"; "Withhold not correction from the child, for if thou beat him with the rod, he shall not die; Thou shalt beat him with the rod and shalt deliver his soul from Sheol."

It would appear that in later times following the advent of the Christian Era, the harshness of school discipline was much relaxed. Scattered through the Talmud are counsels as to the humane treatment of children, the use of caresses and rewards, and the necessity of patience in dealing with childish shortcomings. There are also suggestions as to the desirability of timely explanations, the usefulness of rivalry, and the value of the instruction of the more backward by the brighter members of the class. The educational value of this latter practice is admirably set forth in the saying of the Talmud: "As a small chip of wood sets fire to a larger one, so the younger pupils sharpen the older, and just as steel whets steel so is one scholar sharpened by another."

CHINESE EDUCATION

The educational system of the Chinese is ordinarily taken as illustrating the most extreme form of Oriental education. Unlike the civilization of the Egyptians and that of the Hebrews, the civilization of China has not, in any appreciable fashion, influenced Western thought and life. This is due partly to the geographical remoteness and isolation of China and partly to the exclusive temper of her people. While Chinese education is not without its admirable features, the chief purpose which it has been made to serve in most histories of education has been that of the "horrible example."

Chinese history goes back to a period more than two thousand years before Christ. The Chinese Empire dates from the year 220 B.C., and had, at the time of the recent changes in the form of the Chinese government, remained unchanged in its general character for over two thousand years. There have, of course, been many changes of dynasty within that period of time; but none of these changes have affected, in any radical way, the customs of the country or the mode of life of the common people. The last dynasty, known as the Manchu dynasty, followed the overthrow of a native dynasty by invaders from the north in 1643.

CHARACTERISTICS

Their long seclusion from contact with outside peoples, the density of the population in certain parts of the Empire, and a certain natural conservatism, have combined to produce in the Chinese character certain qualities which differentiate them very strongly from Western peoples. They are, in their ordinary conduct, kindly, submissive, and peaceable—almost child-like, in fact—and yet, on occasion, have shown a remarkable callousness to suffering—both their own and that of others—and a remarkable capacity for resisting oppression. Their best-known characteristic is an unwearying industry, bred in them, no doubt, by a long struggle for survival under conditions of life where every possible effort had to be expended and every available means of subsistence had to be employed. While the Chinese are, in most respects, a highly moral people, their morality is largely of a prudential kind—that is, it is based on habit and expediency rather than on any reasoned convictions as to right and wrong courses of action. Perhaps the most radical difference between the Chinese on the one

hand and Western peoples on the other lies in the slight estimate placed by the former on the value of the individual as such. The individual has value with them only because of the family relationships which he sustains, and this includes, not only relationships to living persons, but relationships to countless ancestors whose spirits must be regarded and conciliated in a great variety of ways. Hence, democracy as we know it, with its accompanying respect for individual rights and its insistence—in theory, at least—upon the sacredness of each man's personality, is a conception with which the Chinese mind had little natural sympathy.

Because of the fact that the continuity of the family and of ancestor worship depends upon the existence of male heirs, women are rather slightly regarded in Chinese society. For example, when a Chinese father is asked as to the number of his children he gives only the number of his sons; but this is no longer true of the Chinese who have come under the influence of Christian teaching.

LANGUAGE

The Chinese language is so different from the languages of Western peoples that it is difficult for a Westerner to understand how it can be made to serve adequately as a means of communication. Parts of speech are, for example, unknown, the grammatical class to which a word belongs in any given case being indicated by tone, accent, or position in the sentence. There is no Chinese alphabet and, hence, even the most elementary education involves the task of learning to write some thousands of separate characters, and an understanding of their meaning. A further complication is introduced by the fact that the literary language—the

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language of books—differs as much from the spoken dialects as Latin does from English, while the spoken dialects themselves have little similarity the one to the other.

NATIONAL SYSTEM OF EDUCATION

The Chinese people have the unique distinction of possessing a national system of education which has been in existence for some three thousand years. From the beginning of this system very great emphasis was placed upon success at formal written examinations conducted under the authority of the state. All chance of official position and promotion depended upon this success, and many cases are mentioned of men who have spent all their lives preparing for and writing on these examinations.

ELEMENTARY EDUCATION

The formal education of the ordinary school-boy begins with four primers, the names of which have been translated as: *The Three Character Classic*, *The Thousand Character Classic*, *The Hundred Surnames*, and *The Rules of Behaviour*. These are memorized without being understood. In reciting, the pupil stands with his back to the teacher so that the test of memory may be a complete one. After the four primers are memorized they are explained by the teacher, and thus the pupil has obtained "the foundation of all Chinese history, philosophy, and social rules, with every proper name that he will ever come across in books" He is also able to recognize at sight three to four thousand ideographs, as the Chinese characters are called. Along with the exercises in memorizing are exercises in writing; the pupil places a translucent sheet of paper over the characters in the text and traces them with ink and a Chinese brush pen.

A Chinese school is a noisy place. The pupil sits on a straight-backed chair or bench at a table or desk repeating his lesson in a sing-song tone, and aloud, so that the master may know that he is at work. So skilled is the teacher, it is said, that in all this babel of voices he can detect any single mispronunciation on the part of any one of his scholars.

LATER STAGES

The second stage of the Chinese boy's schooling involves the learning by heart of the Four Books, known as, *The Confucian Analects*, *Great Learning*, *Doctrine of the Mean*, and *Mencius*. Confucius, it may be explained, was a Chinese sage, born 551 B.C., whose teachings have been the chief subject of study in the Chinese schools for over twenty-three hundred years. The aim of that teaching was "to develop a prince who would rule justly, and a people who would live righteously and obey implicitly the laws of the land." Mencius was a later sage, born 371 B.C., who elaborated the teaching of Confucius. The memorizing of each of the three last books is accompanied by the teacher's explanation of the preceding one. This furnishes such a thorough review that all through his later life the scholar can quote accurately any sentence which these books contain. During this second stage of the Chinese boy's education, writing is continued and original composition is begun.

Following upon the Four Books are the Five Confucian Classics: *Spring and Autumn*, and the *Books of Poetry*, *History*, *Rites*, and *Changes*. These are memorized and explained after the fashion of the Four Books. Apart from their moral value, these Classics contain many choice examples of poetry and belles lettres, and thus serve as models for the higher forms of literary composition.

It will be seen that there is no place in the Chinese curriculum for mathematics and natural science. "The Chinese have never originated any science, nor contributed anything to the development of science, nor studied any results of scientific thought until it was introduced from the West, so that their ideas of nature and its laws are remarkably simple and, in some cases, very absurd." On the other hand, the Chinese have exalted literature as no other people have ever done, since literary excellence, as determined by the examinations, is the sole road to political preferment and a sure means of personal distinction.

THE EXAMINATION SYSTEM

Of the civil service examinations, to which reference has already been made, something further should be said. In its entirety it represents a fivefold sifting, with appropriate degrees and titles, and corresponding qualifications for official position. Of the tremendous interests at stake the following account by an English scholar, long resident in China, gives ample testimony:

> From his earliest school-days, the Chinese boy is taught that men without education are but horses and cows in coats and trousers, and that success at the public examinations is the greatest prize the world has to offer.
>
> To be among the fortunate three hundred out of about twelve thousand who contend every three years for the highest degree, is to be enrolled among the Immortals for ever; while the Senior Classic, at a final competition before the Emperor, not only covers himself, but his remote ancestors, his native village, his district, his prefecture, and even his province, with glory almost of celestial splendour.

THE NEW CHINESE EDUCATION

Although in the foregoing the present tense has generally been used, the past tense would be, on the whole, more appropriate since, beginning with the Imperial reforms of 1898, the Chinese educational system has been largely transformed. These changes have been due mainly to the revelation of China's inability to defend herself in her war with Japan, and to the further national humiliation involved in the seizure by various Western powers of portions of Chinese territory. The spirit of these reforms is perhaps best expressed in the following quotation from a work published in 1898 by the distinguished Chinese Viceroy, Chang-chih-tung, and entitled *China's Only Hope:*

> Keeping in mind the moral of the Sages and the wise men, we must make them the basis on which to build newer and better structures. We must substitute modern arms and Western organization for our old régime; we must select our military officers according to Western methods of military education; we must establish elementary and high schools, colleges and universities, in accordance with those of foreign countries; we must abolish the Weng Chung (literary essay), and obtain a knowledge of ancient and modern world-history, and a right conception of the present-day state of affairs, with especial reference to the government and institutions of the countries of the five great continents; and we must understand their arts and sciences.

CHAPTER IV

ANCIENT GREEK EDUCATION

In the present text the discussion of Greek Education will be confined to a consideration of the educational ideals and practices of the two leading Greek states, Athens and Sparta. Although we speak of them as "states" they were not such in the modern sense of the word, either in area or in population. In population they did not exceed the ordinary English county, but, because of this fact, they gave an opportunity for the individual to take part in affairs of government in ways which are not possible in the large modern nations, and to an extent which made a unique demand upon the leisure and the powers of the ordinary citizen. It will be convenient to speak first of Spartan education, since Spartan life and government, unlike those of Athens, remained practically unchanged throughout the whole period with which this Chapter deals.

SPARTAN EDUCATION

The reputed founder of Sparta was Lycurgus, who lived towards the end of the ninth century before Christ. The constitution attributed to him not only provided a complete organization for the state but contained, as well, explicit instructions for the education of the young. Both the political and the educational system of Sparta were based upon the fact that the Spartans were, in all essential respects, an army of soldiers, encamped among a subject people. The one aim was military efficiency. So pressing was the need of self-protection, so imperious the claims of the state over the individual, that Sparta

has furnished for all time the most conspicuous illustration of a society in which the one idea of national preservation is made to dominate every other interest. Certain features of Spartan life, some of which are picturesque, and others revolting to the modern mind, thus find their explanation. The use of iron money in their system of coinage was intended to discourage commerce, and thus leave the citizen free for the life of the camp and the battlefield. The large degree of liberty allowed to the women, and their right to the independent ownership and administration of property, had a similar explanation. The brutality and coarseness of ordinary life, the flogging of the youths as a religious exercise, the encouragement of stealing as, in certain respects, a virtue, were intended to cultivate the military qualities of hardihood and resourcefulness. Even the systematic assassination of the more independent and capable members of the subject classes served the civic welfare by furnishing to the Spartan youth occupation of a semi-military kind, and by removing from the state possible centres of rebellion.

1. THE SUBJECTS OF STUDY

Spartan education was confined to two branches, music and gymnastics. The first had not the breadth of meaning which we will find attached to the term by the Athenians. It was severely simple and was intended solely to arouse and maintain a martial ardour in the breasts of the citizens. The gymnastics were of a kind to secure strength and physical hardihood, and had little or nothing of the beauty and gracefulness which characterized the physical exercises of the Athenians. Naturally the training in military manoeuvres and in the handling of arms occupied a foremost place.

2. THE STAGES OF EDUCATION

Only such infants as gave evidence of strong physiques were thought worthy of rearing. Weaklings were, as a possible source of danger to the state, allowed to die of exposure. Till seven years of age the boy remained in the care of his mother. At seven he was formally taken over by the state, compelled to live in barracks, and taught and governed by state-appointed officials. In addition to this, every adult had a right to correct and even to chastise any boy who seemed to him to need such treatment. It was customary for individual adults to assume a sort of informal responsibility for individual boys. They thus became their guides and counsellors, as well as their patterns in matters of speech and deportment.

At the age of eighteen the Spartan youth entered the class of *epheboi*, or citizens-in-training, and undertook more directly the preparation for the one worthy calling in life—that of the soldier. The period of training lasted twelve years, though after the first two years they were, in case of need, eligible for service in the field. They were, on occasion, flogged before the statue of Artemis Orthia; theoretically, as a means of sacrifice to the deity, but practically, as a means of removing any traces of softness or effeminacy.

At thirty years of age the period of full manhood was reached. Marriage was compulsory, though home life, as we know it, was impossible, since the man still lived in barracks and ate at public tables. The man still lived the life of a soldier and, when not actually engaged in warfare, found his chief interest and employment in affairs of state, in hunting, and in supervising the education of the young.

THE EDUCATION OF GIRLS IN SPARTA

The independent and honourable position of woman in Sparta has already been referred to. The nature of the Spartan ideal of life forbade the development of most of those virtues and graces which, in modern life, we like to associate with the feminine character. Feminine modesty, as we understand the term, was practically unknown. "The women had but one recognized function, that of furnishing the state with citizens, and they were educated solely with a view to this." Plutarch tells us, in his life of Lycurgus, that "he ordered the maidens to exercise casting the dart" in order that, as mothers, they might be healthy and strong. It would appear also from Plutarch's account that, in connection with their dances and other public exercises, the women took occasion to offer remarks upon the conduct of the men, commenting, as occasion might demand, upon the bravery of one or the cowardice of another.

INSUFFICIENCY OF THE SYSTEM

The insufficiency of the Spartan political and educational systems was abundantly demonstrated, when Sparta, as the result of her successes during the Peloponnesian War, assumed governmental responsibilities outside of her own narrow boundaries. The pure democracy suited to a small group of related families could not be adjusted to these new conditions. The unreasoning and unreasonable severity of her system of training was no protection against the temptations presented by a life among the pleasure-loving peoples of Asia Minor, and the Spartan abroad became a synonym for luxuriousness, dishonesty, and greed. Feebleness

and corruption soon manifested themselves within the state, so that "when Sparta fell before the heroic and cultured Epaminondas, she fell unpitied, leaving to the world little or nothing but a warning example."

ATHENIAN EDUCATION

THE OLD EDUCATION

ITS CHARACTERISTICS

There are two well marked divisions in Ancient Athenian Education: that of the period up to, and including the Persian wars, known as the Old Education; and that of the period which follows these wars, known as the New Education.

To a certain extent the old education resembles that of the Spartans. It magnified the importance of physical training and of the cheerful endurance of physical hardship. It also insisted upon the rigid subjection of the youth to the authority of his seniors. Along with these points of resemblance, there were, however, wide differences. The Athenians never exalted the body at the expense of the mind. Family life was given an independent and important place. The man was never lost sight of in the citizen, neither was the citizen lost sight of in the soldier. The exact bearing of these differences upon the life of the youth will appear as we deal with the more important aspects of the Athenian system.

INFANCY

During the first seven years of his life the Athenian child was solely the care of his parents. Seven days after the birth of the infant there was a ceremony which corresponded rather closely to our christening ceremonies.

The infant was carried around the family altar, a name was bestowed upon him, and exercises of a religious and festive character were engaged in. Food and clothing and nursing were carefully and sensibly regulated. Free play in the open air was encouraged. Many of the games and playthings of modern children were known in Athens. One writer on Athenian life mentions, among others, the following: rattles, dolls, hobby-horses, the ball, the top, the hoop, the swing, the see-saw, and the skipping-rope.

FORMAL SCHOOLING: MUSIC AND GYMNASTICS

At the age of seven the boy was ready for formal schooling. On the way to and from school he was under the charge of an attendant—usually a slave—known as a "pedagogue." School hours were long, and much attention was given to the behaviour of the pupils. While the schools were private undertakings, a general supervision of them was exercised by the state. The two general divisions of the curriculum were, as with the Spartans, music and gymnastics. In Athens, however, these terms were much more liberally interpreted than in Sparta. Music included literature; and Greek literature, as exemplified in the writings of Homer, was a means of instruction, not only in language, but also in morals, in history, and in geography. Reading, writing, and arithmetic were, of course, taught to all. The arithmetic, it appears, was of a cumbrous sort, and dealt only with computations necessary for business. As would be expected among an artistic people such as the Greeks, clear articulation and good expression in reading were insisted upon.

There was, in addition, formal instruction in music in the narrower sense of the term. One authority speaks of the chanting and singing of songs as "the primary

basis of all Greek literary education." According to the well-known theory of Plato, poetry and music together "make rhythm and harmony familiar to the souls of boys, that they may grow more gentle and graceful and harmonious, and so be of service both in words and in deeds."

At about thirteen years of age the youth was introduced to the study of instrumental music. The favourite instrument was the lyre, an instrument originally of four, and afterwards of seven strings. The strings were plucked by the fingers, and the music formed an accompaniment for singing and at times for dancing. Music was valued partly for its value in refining the character and partly as a means of social entertainment. The expertness of the professional musician was deprecated. Plutarch tells us that, on one occasion when Alexander played and sang with exceptional skill, his father remarked, "Are you not ashamed to play so well?"

PHYSICAL EDUCATION

The second great division of the Greek curriculum was gymnastics. The exercises were continued throughout the whole period of boyhood and youth, and were carefully graded. They ranged from free play and the simple running games of children to complicated and difficult exercises, such as throwing the discus and the spear, boxing, and wrestling. Much use was made of emulation and rivalry, since in contests of strength and skill there was opportunity for the development of the moral qualities of fortitude and endurance. "All round" physical development was encouraged by such popular contests as the pentathlon, in which each performer was required to show his ability in the five separate exercises of leaping, running, throwing the discus, throwing the spear, and wrestling.

There was one exercise in which music and gymnastics were combined; that exercise was dancing. The Greek dance was a sort of pantomime—a lively attempt to exhibit character and emotion in typical situations. It was, it would seem, a combination of the modern dance and the modern drama, since, in the chorus, a characteristic feature of the Greek drama, we see an attempt to express, through the gestures and movements, the emotional changes appropriate to the changing incidents in the story.

CIVIC EDUCATION

Till fourteen years of age the Athenian youth divided his school time between the school proper and the *palaestra*, or exercise ground. On the approach of manhood, steps were taken to impart to his education a definitely civic character. The physical side of his education was continued in the gymnasium, an institution which provided much more opportunity for out-of-door exercise than does the modern institution of that name. His moral as well as his intellectual welfare was provided for, first, in the compulsory provision that he should learn the laws of his city, and second, in the many opportunities for contact with his elders in the market-place, the theatre, and other places of public resort.

> Thus, at what is regarded as the most critical age, he was compelled to live a free, breezy, outdoor life, full of activity and stirring incident, his thoughts and feelings directed outward into acts of will, and not turned back upon himself or his own states. At the same time he was acquiring just that practical knowledge of ethical laws and of real life which could best fit him for active citizenship. He now learned to ride, to drive, to row, to swim, to attend banquets, to sustain

a conversation, to discuss the weightiest questions of statesmanship, to sing and dance in public choruses, and to ride or walk in public processions.

MILITARY EDUCATION

At eighteen years of age, if he were able to satisfy the requirements of the law as to parentage and training, the youth was admitted to the ranks of the *epheboi*, or citizens in training. In the period during which the old Greek education flourished, the ephebic term lasted two years. The first year was spent in a sort of barrack-life in the neighbourhood of the city. The second was spent in military duty in the country and on the frontier. There were appropriate examinations at the end of each of these two years, and the passing of the second of these examinations qualified the candidate for full citizenship.

THE NEW EDUCATION

EXPANSION: THE SOPHISTS

After the period of the Persian wars, Athens entered upon a period of marked political expansion. The possession of colonies and dependencies and the growth of foreign trade gave rise to new political and social problems. The rise of democracy within the state made more necessary than ever the study of questions of government and public policy by the ordinary citizen. To meet this demand there arose a new class of teacher known as the Sophists. The Sophists professed to be able to train men for the higher duties of citizenship. They taught rhetoric, or the art of public speech, the various natural sciences as they were then known, and undertook to solve, in a popular and rather superficial fashion, the

philosophic problems of the day. The most novel and, in a sense, the most dangerous of their assumptions was that wisdom and virtue could be imparted through a course of instruction entirely divorced from practice, and a further occasion of scandal to the more conservative members of the community was furnished by the fact that they accepted payment for their services.

The Sophists were the pioneers of a new order of things, one which was, in certain respects, worse, and in other respects better, than the old order. It is true that their favourite maxim, "Man is the measure of all things," could not—at least as they interpreted it—be reconciled with any general religious or state authority, since the term "man" meant for them the individual man, separate from his fellows, and frequently opposed to them in inclinations, tastes, and ambitions. Nevertheless, they broadened the intellectual horizon by interesting the youth of the time in studies hitherto distasteful or unknown, and by their very scepticism they prepared the way for the constructive labours of Socrates, Plato, and Aristotle.

CHARACTERISTICS OF THE NEW EDUCATION

The influences which the Sophists set at work and the practices which they inaugurated make up what is generally called, "The New Athenian Education." For convenience' sake they may be briefly stated as follows:

1. The Sophists and their successors provided for the Athenian youth what in a general way is the equivalent of our modern secondary and university education. They enlarged the curriculum by the introduction of such subjects as mathematics, astronomy, grammar, geography, history, logic, ethics, and rhetoric.

2. This emphasis upon intellectual pursuits naturally tended to diminish the old-time interest in physical and military training. We find that, after the Peloponnesian War, the period of ephebic training was reduced from two to one year, and that, after the Macedonian Conquest of Athens, this military service, once regarded as so important, was made entirely voluntary.

3. The Sophists were educated men who devoted their whole time to teaching and who, as we have seen, made their living by this work. These facts tended to magnify the office of teacher and the importance and difficulty of the art of instruction. The problem of the curriculum and the problem of teaching method, both of which are of permanent concern, and both of which demand fresh consideration in every age, begin with them.

4. A fundamental defect of the Sophistic practice was the tendency to magnify form over content, to neglect sincerity and truth for finish and cleverness. This defect became more manifest as time went on, and, hence, at the present day we use the terms sophism and sophistry as synonyms for all that is artificial and insincere in the intellectual life.

CHAPTER V

SOME FAMOUS GREEK TEACHERS AND WRITERS ON EDUCATION

No account of Ancient Greek Education, however brief it might be, would be complete without some mention of certain teachers and writers whose practices and writings have profoundly influenced later ages. The scope of the present work will permit of a reference to only five—Socrates, Xenophon, Plato, Aristotle, and Isocrates, and to these only in regard to the more outstanding features of their lives and work.

SOCRATES (470-399 B.C.)

HIS RELATION TO THE SOPHISTS

Socrates, the man, is perhaps the best known to us of all the ancient Athenians. Any one who has any acquaintance at all with the history of Ancient Greece knows something of the peculiar appearance of Socrates, his peculiar mission in life, his peculiar method of teaching, and his tragic, though heroic, death.

Socrates was regarded by his contemporaries simply as one of the Sophists. In fact, Aristophanes, the famous writer of Comedy, who was one of those contemporaries, takes him as the typical Sophist, and, in one of his plays (*The Clouds*), represents him as seated in a basket suspended over the stage and giving utterance to all sorts of fantastic scientific speculations. This was pure misrepresentation, however, for while some of the

Sophists—Hippias, for instance—did undertake to explain natural phenomena, Socrates was profoundly indifferent to that subject. To his mind the scientist was engaged in a fruitless because an impossible task, and for him, as for a modern poet, "the proper study of mankind is man." It was not nature, but human nature, which interested Socrates.

In one respect, however, he was at one with the Sophists. He refused to accept any belief or practice simply because it had the support of custom. He accepted the dictum that "man is the measure of all things," but he gave to that doctrine a new meaning. For the Sophists, as we have seen, the term "man" meant the individual man, so that there was no higher test of truth or right than the individual preference and the individual judgment. The "man" who, for Socrates, was the measure of all things, was, on the other hand, the general man, or as we might say, "mankind," or the "universal human reason." Beginning with this belief in the possibility of arriving at truth through an examination of that which deep down in their hearts men really believed and felt to be true and right, Socrates set to work upon what he regarded as his divinely appointed mission—that of instructing his fellow-countrymen in the art of living. When, as an old man, Socrates was accused before a jury of his countrymen of corrupting the youth of Athens, he made in his defence the significant statement that the state, as represented in the average citizen, was like a noble but sluggish horse, and that he (Socrates) had been a gad-fly to sting it into activity. This was, of course, a picturesque way of saying that the ordinary man is very conservative in his views and practices, and unwilling to take the pains to sift the wheat from the chaff in current doctrine.

Socrates, with his eternal questionings and his demand for consistent answers, disturbed this slumber of the mind and made men think, sometimes almost against their wills.

THE SOCRATIC METHOD AND MAXIMS

We have, from the *Dialogues* of Plato, abundant illustration of the method employed by Socrates in his teaching. His custom was to engage men in conversation. Any one who would listen and answer would do, but his decided preference was for some one who claimed to be an authority on some subject or other. Socrates, professing ignorance on the subject in question, would ask for enlightenment. Each succeeding answer on the part of the one questioned led to further questions and reminders of what had been already admitted. So skilfully were the questions put that, as a rule, the boastful one was soon compelled to admit that he did not know nearly as much as he thought he did. So far we have a description of the negative aspect of the Socratic method. The positive aspect was found in an attempt to build up a correct definition or a correct theory upon the basis of the slight amount of truth which had been sifted out from the great mass of error in which it lay embedded. Here, too, the method of questioning (or dialectic, as it was called) played an important part.

The one interest of the teaching of Socrates was, as we have said, the moral interest. Socrates scorned scientific studies, because he could not see that they had any bearing upon man's life as a citizen. Moreover, he believed that only by the searching of one's inner consciousness could truth be revealed. This inner consciousness was for him all-sufficient. For him, as for Browning's *Paracelsus*,

> Truth is within ourselves, it takes no rise
> From outward things.

Hence we have the Socratic maxim, "Know thyself," set forth as an all-sufficient summary of the aim of education.

Another Socratic maxim, and one which seems at first glance absolutely untrue, is to the effect that "Knowledge is Virtue." It was inconceivable to Socrates that a man should know the right and still do the wrong. Although he did not overlook entirely the force of habit, he did not realize that, through evil habit long established, knowledge of the right and intention to do the right might both be made of no avail. A frequent explanation of this rather peculiar attitude is that he himself knew little of that conflict between Knowledge and Will on the one hand, and Desire on the other, which so often rends the bosom of the average man. Whatever the correct explanation may be, it is certain that Socrates interpreted human nature and human conduct almost wholly in terms of intellect.

THE INFLUENCE OF SOCRATES

Because of his amiable and exalted character, and because of his remarkable ability as a disputant and a teacher, Socrates exerted a remarkable influence upon the life of his time. Wherever he went, we are told, he drew about him crowds of youths, some of them of the noblest families of Athens, listening to his remarks and enjoying keenly the discomfiture of his many opponents in argument. This interest in a philosopher whose strange doctrine matched well his uncouth appearance gave serious offence to many of the more conservative citizens, who feared that the old interest in physical excellence and civic welfare would give way before this new interest in philosophical disputation. He was brought before a jury of his fellow-citizens, charged with being a "corrupter of youth," and, partly because of his unwillingness to do anything to placate his enemies, he was condemned to death.

The question, "Was Socrates really an enemy of the state?" has often been debated. The answer is, it would seem, that he was merely an enemy of the old order with which, of course, the old education was bound up. The old system of training the youth, with its care for the development of the body, with its many admirable precepts, and exercises designed to inculcate reverence for the gods and loyalty to the state, made small provision for the higher reaches of the intellect. But a stage had been reached when men, and especially young men, felt that they must think out the problems of personal and national life in ways unfettered by tradition. Though this independence of thought contributed not a little to the downfall of the narrow Athenian state, it conferred a heritage of inestimable value upon later ages.

XENOPHON, (445-354 B.C.)

Xenophon, though a disciple of Socrates, was no philosopher. He is best known to the modern school-boy by his *Anabasis*, the story of the part taken by a band of Greek mercenaries in an effort to seat Cyrus, the son of Artaxerxes, upon the throne of Persia. His interest for the student of the history of education lies in the fact that he is the author of a work purporting to set forth in detail the educational system of the Ancient Persians. The work in question is the *Cyropaedia*, or *Boyhood of Cyrus*. This book was once thought to be a true and faithful account of customs and institutions that had actually existed. Now, however, it is regarded as an educational romance, the first of its kind, based upon the author's study of the Spartan system. The reason for the disguise is easily understood. Notwithstanding the fact that he bitterly resented the attitude of the Athenian democracy towards his master, Socrates, and notwith-

standing the further fact that he had been exiled from Athens for taking part in the Persian Expedition, Xenophon could not forget entirely the ties of blood. He wished his countrymen to share his admiration of the Spartan education, but he recognized that the proud Athenians would pay no attention to a work which extolled the virtues of their hereditary enemies, the Spartans. Hence the necessity of placing the scene of the story in a distant country. The book itself stamps Xenophon as a conservative of even a more thoroughgoing type than were the people who put Socrates to death. The one point in his master's teaching which he assimilated, and which he makes the text of his book, is that the moral aim in education is the supreme one.

PLATO (427-347 B.C.)

Plato, like Xenophon, was a disciple of Socrates, but, unlike Xenophon, he was a philosopher—indeed, one of the first philosophers of all time. While it is impossible to give, in a few paragraphs, any adequate summary of his philosophy or even of his educational theory, yet, in the present instance, some such attempt must be made.

Plato is said to have abandoned, as a young man, the pursuit of poetry for philosophy, because of the influence of Socrates. After the death of his master he left Athens for some years, and is said to have travelled extensively in Italy, Egypt, and Asia Minor. On his return to Athens he began teaching, and founded eventually the school known as the Academy, because of the place where it met. It was the first institution of a sort which became quite common in succeeding centuries. Upon his death he bequeathed his property to the school and thus provided for its continuance.

THE PLATONIC IDEALISM

Plato is known as an idealist, but the term, as used here, must not be construed to mean simply one whose life is actuated by high, though possibly unattainable, moral ideals. He was an idealist in the sense that he believed and taught that the true reality was not to be found in things which might be seen and touched and handled, or in any truths which might be based upon the observation of these things. Reality was for him a something quite apart from the material world. It was to be found in the realm of "ideas." Even the term "idea" did not mean for Plato what it means for us, namely, a mental image which forms a more or less faithful representation of one or more of the objects about us. The idea was the true reality, and particular objects—tables, beds, horses, men, women—were but faint pictures, reflections as it were, of ideas which formed for them the eternal type. Thus there were for Plato two worlds: first, the world of ideas to be apprehended by the reason, and only after the most severe training; and second, the world of material things which is made possible (but just how, Plato does not explain) by the ideas, or types "laid up above." One of the most familiar illustrations of this distinction between the world of ideas and the world of objects is found in Plato's "Allegory of the Cavern" as given in Book VII of the *Republic*. Plato, in this Allegory, asks his reader to conceive of men sitting bound in a cave with their faces turned towards the inner wall. They cannot turn around and see what is behind them, neither can they behold the light of day as it streams in through the mouth of the cave. On a raised platform behind them a fire is kindled, and figures pass and re-pass between the fire and the back of the cave. These figures bear objects of various sorts,

and the shadows of these objects are thrown on the wall towards which the prisoners' eyes are turned. Since these prisoners see nothing else, since they never have seen anything else, they regard these shadows as reality and deride any who seek to enlighten them.

The interpretation of the Allegory is simple enough. The prisoners are mankind, the shadows on the wall of the cave are the appearance of things to our senses. The fire is, presumably, the light of human intelligence. The images of the objects which are carried before the fire, while less unreal than the shadows, are yet not the true objects, though they may be mistaken for them. The daylight world outside represents, in the Allegory, the realm of pure intelligence in which ideas, which are the true realities, are apprehended directly. The ordinary man lives in the cave satisfied with the fleeting things of sense; the philosopher is the one who is enabled to turn his back upon the shadows, and to accustom himself gradually to the world of realities as it is revealed by the sunlight of the Divine intelligence.

Here we have suggested the purpose of education. It is to unbind the prisoners who mistake the shadows of sense for true knowledge, to turn them around and, after accustoming them to the objects in the cave and to the fire whose light is in a sense a reflection of the light of the sun, to lead them forth and show them the light of day outside. All this is, however, a slow and painful process, and many will turn back because of the pain that is involved.

ARISTOTLE (385-322 B.C.)

Aristotle, though not an Athenian by birth, came to Athens at an early age, and was, for many years, a pupil of Plato. After a number of years spent in foreign resi-

dence and travel, he returned to Athens as a teacher of philosophy, and remained there until his death. His name is associated with the gymnasium of the Lyceum, as is Plato's with the Academy. The fact that both these terms remain with us as names of typical educational institutions, is a strong testimony of the permanent greatness of these two teachers.

Aristotle is perhaps best known to the popular mind as the tutor and friend of Alexander the Great, and nowhere in literature do we find a truer estimate of the value of the genuine teacher than in the description which Plutarch gives us of Alexander's attitude towards his distinguished master: "He (Alexander) loved and cherished Aristotle no less, as he was wont to say himself, than if he had been his father, giving this reason for it, that, as he had received life from the one, so the other had taught him to live well."

HIS CONCEPTION OF EDUCATION

In Aristotle's opinion education is closely related to the sciences of Ethics and Politics. Ethics concerns itself with a description of the good life. Politics, or government, seeks to make this good life possible to all, and education is one of the means which Politics employs to this end. The modern idea of education, which makes it one of the chief functions of the state, comes very close indeed to Aristotle's conception.

The aim of education in Aristotle's view is, as has been said "virtue." And virtue depends upon three things: first, upon natural disposition, or, as we might say, heredity; second, upon right habits of thought and action; and third, upon insight. In his emphasis upon the importance of habit, Aristotle is very modern indeed,

and he is modern also in his clear perception that "habit" must be at the outset largely external. It must be enforced upon the pupil by the teacher, since only at a comparatively late period does the pupil do the right because it is the right, and accept it as the law of his life because of its intrinsic reasonableness.

In other respects, however, Aristotle's conception of education differs greatly from the modern view. A "liberal" education is, according to him, not an education which makes men free and, therefore, masters of themselves and of their destiny, but chiefly an education which is suitable for a free man as distinguished from the slave, or from the mere artisan, who is in a sense a slave to the routine of his trade. This presupposes a division of society into fixed classes, certain of which are permanently superior to others. This is, of course, diametrically opposed to the democratic and the Christian view of society.

THE CULTURAL IN EDUCATION

In his general position Aristotle may be regarded as a champion of the broadly cultural in education, as against the claims of narrow utility and specialization. His own statement of his views in this connection is of sufficient interest to warrant quotation:

> It is clear that only such knowledge as does not make the learner mechanical should enter into education. By mechanical subjects we must understand all arts and studies that make the body, soul, or intellect of freemen unserviceable for the use and exercise of goodness. That is why we call such pursuits as produce an inferior condition of body, mechanical, and all wage-earning occupations. They allow the mind no leisure, and they drag it down to a lower level. There are even some liberal arts, the acquisition of which, up

to a certain point, is not unworthy of freemen, but which, if studied with excessive devotion or minuteness, are open to the charge of being injurious in the manner described. The object with which we engage, or study them, also makes a great difference; if it is for our own sakes, or that of our friends, or to produce goodness, they are not illiberal, while a man engaging in the very same pursuits to please strangers, would, in many cases, be regarded as following the occupation of a slave, or serf.

ISOCRATES (436-338 B.C.)

THE STUDY OF LANGUAGE AND LITERATURE

While Isocrates does not deserve to rank with Socrates or Plato or Aristotle, he was still a teacher of much influence in the Athens of his day. He is of especial interest to students of the history of Education because of the system which he advocated and which he exemplified in his own teaching. It was, to be brief, an attempt to found a complete education upon the study of language and literature. While he professed to be a teacher of philosophy, philosophy for him meant merely "practical wisdom attained through literary culture." "The ideal of the man of culture, the man of 'philosophy,' was, with Isocrates, in the first instance, the man who can speak well and worthily upon worthy topics, and this as a preparation for active participation in civic life."

Isocrates did not underrate, as did some of the Sophists, the necessity of vigorous and original thinking on the part of the student. His students were taught to "make" speeches, not merely to imitate the speeches of others.

His conception of the discipline to be received through language study was singularly like that of some modern

writers. This study, in his view, quickened the perception, sharpened the judgment, and enlarged the powers of expression, so that the student was furnished with the most complete equipment for active life.

Isocrates was the first to give clear expression to what has been called the theory of the "disciplinary value of language study." As such he is the precursor of many of the schoolmasters of the Renaissance, Sturm, for instance, and of certain famous English schoolmasters of the nineteenth century.

CHAPTER VI

ROMAN EDUCATION

ITS TWO PERIODS

For the purposes of the present outline it will be sufficient to divide Roman Education into two periods: first, the period of the so-called National Education, lasting five hundred years or more, and terminating with the establishment of Greek culture at Rome; and second, the period of Graeco-Roman Education, during which Greek ideals greatly modified the ancient Roman ideals and practices. It is impossible to make a rigid division between the two periods. The influence of Greek culture was felt at Rome as early as the beginning of the third century before Christ. From that time onward, through the various channels of commerce, politics, religion, art, and literature, this influence increased until it produced a civilization which was as much Greek as it was Roman. In 156 B.C., Greece became a Roman province, but its political absorption served only to heighten the tide of Greek influence which was already running strong. However, if it were necessary to fix a boundary mark between the two educational periods, the date just given would, perhaps, do as well as any other.

EDUCATION DURING THE NATIONAL PERIOD

During the National period education was simple and practical in character and was almost wholly a family concern. What little formal education was necessary was provided at home or by private schools, of which

there seem to have been a considerable number. Much of the home education was of value for civic purposes. The boy would learn from his father's morning discourses with his clients or from the conversations of his elders at their meals, something of the traditions of his family and of the lives of distinguished men. As in ancient Athens, the public duties of the ancient Roman were many and varied and, hence the son, who, according to custom, was much in his father's company, could not fail to learn incidentally and effectively a great deal which would later be of value to him as a citizen. It is said that the sons of senators were even allowed to go with their fathers to the Senate House and there listen to discussions of public policy.

At sixteen years of age the youth assumed the *toga virilis*, the distinctive dress of manhood. This change was made the occasion of various ceremonies, both domestic and public. Henceforward, through military exercises and participation in public ceremonies, he received almost constant training in the duties and responsibilities of citizenship.

PLACE OF RELIGION IN ROMAN EDUCATION

The religion of the Romans differed from that of the Greeks, not in the fact that the former possessed fewer deities than the latter, but in the fact that they were less given to investing their deities with personal forms and attributes. The Roman deities were, in the main, abstractions. Jupiter and Juno represented, respectively, manhood and womanhood in the abstract; Ceres, the creative power so manifest in nature; in fact, every natural process and every human relationship seemed to have its embodiment and sanction in some deity or other. The gods were everywhere, and constantly de-

manded reverence and recognition. First, there were the gods of the household—Vesta, goddess of the fire on the family hearth, and the Lares and Penates, guardians of the family life and the family estate. Then there were the gods of fields and woods, of the various seasons, and of the various farm occupations. All these demanded their appropriate rites, which must not be withheld if the life of the family and the farm was to go on prosperously. This would, naturally, have a profound impression on the sensitive mind of the child. As one of the later Roman poets has described it:

> The young heir worshipped whatever his grey-haired ancestors had pointed out as worthy of reverence; he had seen the hearth and its gods daily honoured with votive perfume; he had watched his mother, pale with anxiety, praying before the image of Fortune in the house; then he had been lifted on his nurse's shoulders to kiss the statue himself and to put up his childish petitions; and so he was imbued with the spirit of his creed long before he marvelled at the splendour of the worship of the Imperial City.

Thus it will be seen that the religious education of the Roman child began in its infancy and formed a part of the atmosphere in which his daily life was carried on.

EDUCATION AND THE HOME

Mention has already been made of the religious life of the Roman home. But there were other phases of the home life which had an important educational significance. There was first the authority and influence of the father. This authority, the *patria potestas*, was absolute, extending even to matters of life and death.

The education of his sons was the father's special care, and it would seem that in the best days of the Roman state this duty was carefully performed. The position of the wife at Rome, unlike that of the Athenian wife, was one of high honour. She was in an especial sense the custodian of the family welfare. The high moral character of the ancient Roman matron and her skill in the management of household affairs are matters of proverbial knowledge, and historians unite in regarding the decay of family life and of domestic morality as one of the chief causes of the downfall of the Roman empire. The daughter was largely under the mother's care, and was provided with instruction in spinning, weaving, cooking, and the various other household arts. This was regarded as necessary, not as a preparation for a life of domestic service, but as a preparation for the proper management of her household when she herself should become a wife and mother.

THREE STAGES IN ROMAN EDUCATION

A view of the whole course of Roman history reveals a recognition of the three stages into which modern education is ordinarily divided. During the period of National education, the schools were mainly of the elementary type; but, with the introduction of Greek culture, the development of a Latin literature, and the expansion of the Roman empire, there appeared teachers and schools which corresponded in a general way to our schools of secondary and higher grade. The influx of the Greek learning had upon Roman social life something of the same effect as that which was produced in Athens by the advent of the "new" learning of the Sophists. The study of the "book," and formal exercise in the arts of rhetoric and debate, supplanted in a great

measure the active out-of-door life and the learning by observation and imitation which had formerly been the accepted preparation for manhood.

THE ELEMENTARY SCHOOLS

The child's earliest training was carried on at home, and this training frequently included, in the early period of Roman education, more or less of formal instruction in such arts as reading, writing, and calculation. Even in early times, however, there were *litterarum ludi*, or elementary schools. One of these is referred to in the well-known story of *Virginia*, as told by the Roman historian, Livy. These *ludi* were often held in sheds or booths originally intended for the display and sale of goods. The pupil was ordinarily attended by a slave who performed the duties of guardian and also, at times, it would seem, of supervisor of studies.

The hours of school would, to a modern youth, seem decidedly inconvenient. We infer from various casual remarks by certain of the Latin poets that children went to school before daybreak, often buying their breakfast at the shops on the way. But school was over for the day at noon, so that the daily hours of attendance were not much longer than those which prevail in the ordinary elementary school to-day. The school year was some eight months in length, there being a long vacation at midsummer, and two shorter ones which corresponded in a rough way to our Christmas and Easter vacations. The weekly market-day was also a holiday. The scholars, or their pedagogues for them, carried boxes containing writing materials, book rolls, tablets, and the *calculi*, or pebbles, with which arithmetical "calculation" was done. The tablets were not unlike the ordinary framed slates; their surfaces were coated with wax so that characters might be

traced on them with a sharp-pointed instrument known as a stilus. The other end of the stilus was broadened, for the purpose of erasing the writing when necessary.

THE ELEMENTARY CURRICULUM

The subjects of instruction in the elementary school were severely practical in character. The pupil was taught to read by a method which has persisted almost to the present time. He learned first the names of letters in their regular order and was taught to write them. Then the letters were combined into syllables ba, be, bi, etc., ca, ce, ci, etc., and the pupil spelled and pronounced these until he had them by heart. It appears that every possible syllabic combination was attempted before words were introduced. Writing was from copiés set by the master, and these copies usually took the form of moral sentiments such as were common in the copy books of a generation ago in our own country.

Arithmetic occupied an important place, partly because of the vast commercial interests of which Rome was the centre, and partly also because of the cumbersome character of the Roman notation, and the consequent difficulty in the way of obtaining a mastery of the subject. This notation, which is still used to a certain extent by modern peoples, has two chief defects: first, the numbers from one to nine are, with two exceptions, not represented by single characters; and, second, there is no zero sign. The mastery of the art of computation involved the use of the *abacus*, a device of which the modern numeral frame is an illustration. The Roman abacus was used to facilitate the manipulation of all of the four simple rules—addition, subtraction, multiplication, and division. Extensive use was also made of the fingers in computation, so that by the use of both hands any

number up to ten thousand could be expressed. From a passage in Quintilian's work on *The Training of the Orator*, we infer that this latter method was frequently used by public speakers in giving statistical information, while the command of it was expected of any one who pretended to any degree of education.

A certain element of moral education was found in the passages used for reading, the copies set for writing, and the required memorization of the *Law of the Twelve Tables*, an ancient summary of political rights and duties. This last had, apparently, disappeared from the schools by the time of Cicero, and had been supplanted by a Latin translation of Homer's *Odyssey*.

THE ELEMENTARY SCHOOLMASTER

Elementary schoolmasters were held in slight repute among the Romans. They were almost invariably either slaves or freedmen, their methods of teaching were crude, and their methods of discipline severe. The pupils studied aloud, and class recitation, as it is found in modern schools, was unknown. Each pupil recited individually to the master; the rod and the strap were part of the furniture of every school-room, and most of the references in the Roman satirists to the schools of their day contain unmistakable evidences of the harshness of the current school discipline and the low character of the schoolmasters themselves.

SECONDARY EDUCATION

ITS AIMS AND METHODS

Secondary education of any formal sort was of comparatively late introduction in the Roman state. The secondary school was presided over by the *grammaticus*,

or *litteratus*, and the chief aim was a ready and a correct command of language. The Greek language was studied alongside of the mother tongue and, in fact, Quintilian recommends that Greek be studied first, on the ground that, since it was a foreign language, its mastery required more formal attention in the school than did Latin.

The practical aim was supreme throughout. The average Roman citizen was, as has been shown, required to lead a life which was largely public in its character, and the ability to speak well was a matter almost of necessity. Then it would appear that the Roman audiences were extremely critical, and demanded of all speakers to whom they conceded an audience a scrupulous care as to gesture, voice, pronunciation, and choice of words.

The poets and other authors were studied, however, not only as guides to correct expression, but also because of the ideas which their writings contained, and especially because of the moral ideals which these writings set forth. Then, too, certain other subjects were valued because of the contribution which they made to the training of the successful public speaker. Music helped in the appreciation of the lyric poets and also in the cultivation of the speaking voice. The study of geometry was supposed to sharpen the intellect and help in the detection of fallacies in argument.

Attention was also given to composition both in its oral and in its written forms. According to Quintilian, the pupil began with simple exercises, such as the telling of one of the fables of Æsop, first in a simple and afterwards in more elaborate form. Then compositions were set upon definite themes, and the pupil was occasionally asked to write imaginary speeches such as might properly have been delivered by such and such a famous character

on such and such an occasion. These compositions were frequently learned by heart, and this exercise, together with the learning of passages from the literature studied, was supposed to develop the memory.

THE HIGHER SCHOOLS

STUDY OF RHETORIC AND PHILOSOPHY

In addition to the schools of the grammatists, there were more advanced schools for the special study of rhetoric and philosophy. The teachers of these schools were specially trained for their work and were generally held in very high regard. The methods of teaching were modelled after the Greek usage, and were so elaborate in their character that the modern student finds great difficulty in following them in all their details. The description given by a recent writer on Roman Education of a form of composition known as the *chria* will illustrate the elaborateness and formality of these rhetorical exercises.

> The usual treatment was somewhat as follows: first, the author of the saying was eulogized; then his words were paraphrased and developed, so as to bring out the meaning; next, the truth of the thought was established, both positively and negatively, in the latter case by pointing out what results would follow if it were not true. Then came a comparison, an example drawn from history, confirmatory quotations from standard authors and, finally, a conclusion which often took the form of an exhortation.

QUINTILIAN

Much of what we know of the Roman rhetorical schools as well as of the practices in the schools of a less advanced sort is derived from the well-known work, *The*

Training of the Orator, by Quintilian, a Roman lawyer, teacher, and writer on education. Although a native of Spain, Quintilian was educated at Rome and spent the major portion of his active life there. After a period of successful practice in the courts, he adopted the calling of the rhetorician, and came to be recognized as the greatest teacher of his day. There is a sentence in one of the historians which would lead us to believe that he was one of the first of his class to receive a salary from the public treasury. This public support of education, which began in the reign of Vespasian (A.D. 71-79), eventually spread, until, in the centuries which followed, not only the schools of rhetoric but the grammar (or secondary) schools received public aid in one form or another.

Quintilian is deserving of all respect because of his broad and sane views on educational matters. The training of the orator, or accomplished man of affairs, demanded, in his judgment, not only the perfecting of the literary style, but the cultivation of the general intelligence and the development of a sound moral character. Hence it was necessary to give close attention to the earlier stages, since these formed the foundation of all later success. He had nothing but scorn for those teachers who, by means of short cuts and special devices, sought to accomplish in a few months that which properly needed years of instruction and practice. Moreover, he was thoroughly convinced of the potency of the teacher's example as an indispensable support to whatever of moral instruction the school might provide.

Both in his breadth of view, and in the studies and exercise which he commends, Quintilian closely resembles the Greek writer Isocrates. He is of special interest to the modern teacher: first, because of his sensible com-

ments on a wide variety of practical topics; and second, because he has helped to perpetuate the theory that the language studies are pre-eminently the studies for the development of personal character, as well as for the cultivation of those mental powers and executive abilities which qualify for leadership in any civilized society.

CHAPTER VII

EARLY CHRISTIAN EDUCATION

DECLINE OF THE PAGAN SCHOOLS AND ROMAN EMPIRE

For centuries after the death of Augustus the schools of the grammatist and of the rhetorician remained the common means of public education in the Roman Empire. Not only in Italy, but in Gaul and in Spain, every large town had its rhetorical school. But the practice of these schools was far remote from the ideals of Cicero and Quintilian. As political authority became more and more centralized and all really representative institutions disappeared, there ceased to be any call for an education which was to fit one for political life. The curriculum of the schools of rhetoric finally resolved itself into a formal study of the Latin Classics and the acquiring of facility and ingenuity in making formal orations on certain conventional topics. This education had, at any rate, never reached the great mass of the people, and it was quite incapable of doing anything towards civilizing and assimilating the thousands of barbarians that pressed into the Empire from time to time. Thus the importance and the usefulness of the pagan schools declined, and they were finally closed by an edict of Justinian in 529.

It is not necessary to describe in detail how the Roman Empire, never having developed representative local institutions to assist in carrying the burden of government, fell at last by its own weight. Decay of moral and patriotic spirit from within and constant migrations of barbarians from without, caused the slow

but sure disintegration of that mighty power whose influence had been so great, so widespread, and so lasting that, for centuries afterwards, men could hardly discuss new political developments, such as those of the feudal system, except in terms of Roman law and Roman institutions. But while Roman power was weakening to decay, there was rapidly developing, within the Empire, an institution, not political but religious, whose ideals and forms of organization were for many centuries to dominate the intellect and, to a large extent, the political development of Western Europe, namely, the Christian Church.

RISE OF THE CHRISTIAN CHURCH

For a thousand years after the decline of pagan schools in the fifth century the Church controlled the means of public education in Europe. At first the growing sect of Christians did not develop any definite system of schools or of education. Few in numbers, drawn largely from a lowly class of people, without carefully defined doctrines or definite organization, and often persecuted, they looked away from a world that was evil, and fixed their hopes on the promise of a world to come. Their daily life was a constant moral discipline, and they attached no importance to the knowledge of worldly things or to the advantages of worldly success that the schools of the time could give. But, as the inherent power of the new faith brought more and more converts and widened the sphere and influence of the church, it seemed necessary, for defence against an adverse world and for preserving the faith in its purity, to have some more definite formulation of doctrine and some more adequate organization and leadership. In connection with these arose two forms of educational activity—the catechumenal and the catechetical schools.

EARLY CHRISTIAN SCHOOLS

The schools of the catechumens, that is, "those under instruction," were the outcome of the practice of requiring those who were about to be received into church membership to undergo a period of probation and of religious instruction. This instruction might be given by any one skilled in the faith, and was, at first, not the function of a special class. Before 300 A.D., however, the system had assumed definite form; recognized textbooks were used, and the course of study extended over three years. By that time also, there had arisen among the Christian sects in various lands schools which did not confine their curriculum to religious knowledge, but which, in addition, gave instruction in all the branches of science and rhetoric, and in most of the philosophy then current in the pagan schools. These were known as catechetical schools, and were, in some cases, a development of the catechumenal schools. Here many of the clergy received their training, and so were prepared to assume leadership in a church that had now come to play a large part in human affairs, and that had to contend with enemies who were armed with all the learning of the time. As the custom of requiring all the clergy to have some special training in higher schools became general, these catechetical schools became attached to every bishopric in Western Europe and, with the growth of the church in wealth and power, and the development of the cathedral system, these schools became known as bishops', or cathedral, schools.

As the church came more and more to assert its supremacy over the pagan world, the feeling grew stronger that the content and spirit of pagan literature and philosophy were hostile to Christian belief and morals. There had grown up, in the meantime, too, a

large body of Christian literature and a formulated system of church doctrine which were deemed in themselves sufficient for the purposes of even higher education. Accordingly, most of the classical literature of Greece and Rome was, for centuries, banished from the schools.

AIM OF THE CHRISTIAN SCHOOLS

So it came to pass that when, about the sixth century, the church controlled the educational activities of Western Europe, the education it offered was very different, both in aim and content, from that of the former schools of Greece and Rome. In the first place, the aim was no longer to fit a man for citizenship or for fulfilling any function in secular life, but rather, through religious training and discipline, to prepare him for the service of the church and for a life to come. In the second place, believing that the world without and human impulses within were alike mostly evil, the Christian deemed it a sin to seek the joys of this life, and suppressed the desire to develop his natural powers of body and mind. Education aimed rather at moral training than at intellectual achievement.

THE MONASTERIES

The bishops', or cathedral, schools were not the only agencies, nor from the sixth to the thirteenth century, were they the most important agencies through which the church provided for the education of its members. During the early Middle Ages thousands of monasteries, scattered over Western Europe, had an influence on religious organizations that it would be hard to overestimate. In them the monks, or regular clergy (so called because they lived by *regula*, or rule) comprised a body of men, cut off as far as possible from all worldly concerns, bound by pledges of poverty, celibacy, and

obedience, and devoted wholly to furthering, in their chosen way, the claims of religion and the church. In restless feudal times, when might was right, and when new political institutions were vigorously striving to assert themselves, the cloisters were harbours of refuge for those who would follow the things of the spirit, as well as for those who sought to avoid the dangers, distresses, or responsibilities of life in that rude time. By the rule of St. Benedict, which, after the sixth century, commonly determined the course of life in the monasteries, stress was laid, not only on constant religious devotion, but on regular manual labour and on reading and study. The monks were required to spend two hours of their day in reading—reading which was commonly confined to the Scriptures and the writings of the church fathers. Hence, those that wished to be admitted to membership were taught at least reading, writing, singing, and probably enough arithmetic to calculate the date of the church festivals. Such was the content of study in what might be called the elementary schools in the monasteries. Occasionally, students were admitted who did not intend to enter monastic life. But the number of these externs, as they were called, was generally very small.

THE SEVEN LIBERAL ARTS

In many monasteries, as in the cathedral schools, much more advanced courses were given, comprised in the so-called Seven Liberal Arts: namely, grammar, rhetoric, dialectic or logic, arithmetic, geometry, astronomy, and music. The first three of these were commonly known as the *trivium*, the last four, as the *quadrivium*. To have a proper idea of this curriculum we must remember that the content of these subjects was

much wider than is now the case; grammar, for instance, included literature; rhetoric included history and composition, particularly the composition of business letters and legal documents; geometry included what was then known of geography, even in some cases a knowledge of the products of various countries; astronomy included some elements of physics. Beyond the liberal arts, and of more importance than all, was the study of theology. All instruction was in Latin, then the universal language of literature and of the church, of official records, and large commercial transactions.

But the services performed by the monasteries were not confined to the educational activities mentioned. Every monastery possessed its *scriptorium* in which manuscripts were preserved and copied, and to them we owe what we have left of the heritage of classical learning. In a barbarous age the monks kept alive the tradition of culture. They taught the dignity of manual labour, and they furnished to the world the only class of professional men learned in law, medicine, or divinity that Europe then had. To them we owe the beginnings of the universities, as well as the spirit of missionary enterprise that spread over Europe a knowledge of the Christian faith.

CHAPTER VIII

CHARLEMAGNE AND ALFRED THE GREAT

THE darkest period of European history was from the sixth to the ninth century. Here and there, as we have seen, monasteries encouraged study, and some maintained large and flourishing schools. In the sixth and seventh centuries the monastic schools of Ireland were the intellectual centres of Europe. But with the great body of the clergy learning had sunk to a low ebb. Outside of the church there was no provision for it at all. Not until the revival of commerce that followed the crusades in the eleventh century do we hear of any demand for a knowledge of reading and writing, except from those who intended to enter the church.

The ninth century witnessed two notable attempts on the part of secular rulers to better the social conditions of their people by raising the level of intelligence. In both cases their first care was to improve the only agencies of education then in existence, the schools of the church.

THE SCHOOLS OF CHARLEMAGNE

Charlemagne, chosen king of the Franks in 771, had extended his power over most of Western Europe. Eager to establish law and order on a firm basis throughout his kingdom, he called to his assistance his constant ally, the church. Something had first to be done, however, to increase the zeal and learning of the clergy themselves. Charlemagne made his court the centre of learning in Europe. He attracted to it great scholars, Peter of Pisa, Paulus Diaconus, and, greatest of all, the Englishman, Alcuin, master of the grammar school at York. He decreed that schools should be established in connection

with all monasteries and bishoprics, and he brought from Rome teachers of singing, arithmetic, and grammar. An attempt was made to institute parish schools for the education of the masses. The clergy were to be periodically examined by the bishops to see that they possessed at least the minimum of learning required. He urged that the greatest care to taken in transcribing manuscripts, and to him we owe the adoption of an improved script.

Charlemagne's famous "School of the Palace" was the centre of this intellectual revival. Here, under Alcuin's guidance, and by the use of his text-books, boys and girls acquired the rudiments of monastic learning, while men and women, amongst them the great Charlemagne himself, met for study and discussion. A large library was accumulated.

RESULTS OF CHARLEMAGNE'S REFORMS

The lasting results of his great reforms were: first, a marked improvement in the correctness of Latin as spoken and written by educated men of the time; second, the establishment of a new tradition of learning in Western Europe; third, encouragement of native Latin literature; and fourth, greater care in the transcription and preservation of manuscripts. Charlemagne himself, though he spoke the colloquial Latin as readily as his mother tongue, and could follow spoken Greek, was a warrior and statesman rather than a scholar. Yet his zeal for learning was very earnest. We cannot contemplate without emotion the picture of the war-hardened king, struggling in vain with a task that children to-day accomplish with ease. "Charles," says his secretary, Einhard, "tried to learn to write, and used to keep his tablets and writing book under the pillow of his couch, that when he had leisure he might practise his

hand in forming letters; but he made little progress in this task, too long deferred, and begun too late in life." On Christmas day, 800, Charlemagne was crowned by the Pope in Rome as Emperor of the Romans, and it seemed for a time as if the glories of the Ancient Empire might revive. But his successors were unable to hold in subjection the various races that made up his polyglot Empire. The repeated incursions of the Northmen added to the difficulty, and within a century the possibility of a united empire had disappeared. In its place came the feudal system and the rise of the modern nations of Europe.

ALFRED THE GREAT

Just a hundred years after Charlemagne, Alfred the Great attempted similar reforms in England. Having defeated and made peace with the invading Danes, he set himself to promote law, order, and intelligence among his people. The monasteries were reformed; scholars were brought to Wessex from all parts of England and from the Continent; schools were opened, and text-books provided. He, too, had his Palace School for the education of his own children and those of the nobles. He urged the need of educating laymen as well as clergy. All free-born youths who could afford it should, he said, learn in their youth to read English writing. Unlike Charlemagne, King Alfred was a scholar, and himself translated into English the best known books of his time in philosophy, history, and religion. In his reign the *Anglo-Saxon Chronicle* was begun in the monasteries. Though his successors spent their energies, not in establishing schools, but in reconquering Northern England from the Danes, the tradition of Alfred's zeal for learning was not forgotten. Never again did the state of learning sink so low as it had been before his reforms.

DOWNFALL OF CHARLEMAGNE'S EMPIRE

We have seen how Charlemagne's Empire in Europe broke up after his death. His successors were too weak to restrain the barons, repress civil wars and, at the same time, withstand the pressure of barbarian attacks from without. Hardy Norsemen harried the coasts, and finally settled in France and founded Normandy. Fierce Hungarians crossed the Danube and threatened Germany and Italy. The Saracens held Sicily and southern Italy and were pressing north. The northern invasion also affected England, where King Alfred had to divide his kingdom with Danish invaders.

But the wave of barbarian invasion soon exhausted itself. The invaders were, in most cases, granted territory and were converted to Christianity. By the time of the Norman Conquest of England, 1066, European nations were free from the fear of barbarian invasion. When they next took up arms, it was not to defend Europe, but to attack Asia. The famous Crusades, which occurred at intervals from 1096 to 1291, introduced to this new Europe the civilization of the Ancient World.

THE FEUDAL SYSTEM AND CHIVALRY

Meanwhile, from the tenth to the thirteenth centuries inclusive, Europe had made rapid progress in civilization and in the development of new political and social institutions. Out of the ruins of the Empire which the genius of Charlemagne had created, arose the feudal lordships which were afterwards consolidated to form the modern national governments of Europe. The feudal organization of society was the basis of chivalry, the first institution in the Middle Ages to develop a system of secular education.

CHAPTER IX

RISE OF MEDIÆVAL CULTURE

THE EDUCATION OF CHIVALRY

THE development of feudalism as a social and political system resulted in a hierarchy of classes, each with well-ascertained rights and duties. The highest class in this social system had developed, by the twelfth century, under the name of chivalry, a standard of social life and conduct that required a practical training not possible in church, or monastic, schools. For the first time since Roman days a class had arisen that demanded an education not wholly, or even mainly, moral or intellectual. The ideal of the perfect knight demanded a thorough physical training and a practical knowledge of the arts of war and the chase, as well as instruction in the social arts and graces that were then considered to be characteristic of the gentleman.

The education of the knight began early. Until seven years of age he remained under his mother's care. From the seventh to the fourteenth year he served as a page in the hall of a well-known baron, or, perhaps, of a lordly churchman. Some of the more fortunate might serve their apprenticeship to knighthood at a royal court. Here, by personal attendance on knight and lady, they learned the duties of reverence and obedience and were taught accomplishments befitting their social rank—to sing, to play the harp, to know the rhymes of the minstrels and the rules of courtesy.

At the age of fourteen the page became a squire. His opportunities for taking part in the life of court or hall were widened. He cared for his master's horse and

armour and was taught their uses and management. He had his part to play in the hunt or at the tournament. His training in music and verse was continued, and to it was added, at times, the knowledge of some foreign language. The traditions of knighthood were ever before him—courage and loyalty to his master, courtesy and respect for women, a sense of his religious duties, and a knowledge of social rank and of the rights of his inferiors. At the age of twenty-one knighthood might be conferred, and its impressive ceremonial, to which the church added the sanction of religion, reminded him, by its vows, of the essential aims of his long apprenticeship. These vows bound him "to defend the church, to attack the wicked, to respect the priesthood, to protect women and the poor, to preserve the country in tranquillity, and to shed his blood in behalf of his brethren."

A corresponding education was given also to girls of gentle families. To a knowledge of the social, religious, and domestic duties of their rank, were added such accomplishments as needlework, reading, music and, probably, a foreign language. The chief aim in the education of girls was to fit them for marriage with one of their own rank.

The best traditions of chivalry have had their influence down to our own day. They tempered the rudeness of the times, and were a constant reminder to the upper classes of the fact that they had duties as well as rights. The love of story and song encouraged the growth of a native literature. The age of chivalry was the era of the troubadour and minnesinger, of a wealth of romantic and heroic legends; the Paladins of Charlemagne and the Knights of King Arthur's Round Table live for us yet.

INFLUENCE OF ARABIC CULTURE

No longer threatened by barbarian attacks, the men of the eleventh century were free to turn their energies to other fields than war, particularly to travel, commerce, politics, and learning. European scholars went to Spain and Sicily, then the homes of Arab culture, the most advanced learning of the time. Arab scholars had preserved the science, the mathematics, and the philosophy of Ancient Greece, and added to it all the learning of the East. They excelled particularly in mathematics, in science, and in medicine. They introduced in Europe the Arabic notation which they had borrowed from India. They had developed the science of algebra and had made many discoveries in chemistry. Through them Europe was once more made acquainted with the philosophy of Ancient Greece, and particularly with the works of Aristotle.

GUILD, BURGHER, AND CHANTRY SCHOOLS

With peace, too, came a revival of commerce and the growth of towns and cities with a social and political life of their own. Commerce was, for the most part, controlled by voluntary associations known as "guilds"; merchant guilds and craft guilds exercised something of the function of our Manufacturers' Associations and Trade Unions. The demand for some education for those who composed these new social classes resulted in the formation of guild and burgher schools in many towns and cities. Though these were controlled and supported by the guilds or the town councils, yet they were established only with consent of the church, and the teachers were always clergy. They taught reading, writing, and reckoning, and used the vernacular language. In some cases higher instruction of the monastic type was given. The system of apprenticeship which

the craft guilds developed afforded, too, an education in the practical arts.

A further provision for elementary education resulted from the multiplication of chantries, that is, endowments of clergy to say prayers for the souls of the founders. These clergy, in most cases, added to their duties the care of a school, and the chantry schools were, for centuries, one of the commonest agencies of elementary education.

THE SCHOLASTIC PHILOSOPHY

By the eleventh century all Europe was nominally Christian, and the interests of the great churchmen were turned from missionary enterprises to the maintenance and development of their spiritual and political power. Influenced by the rediscovered philosophy of Aristotle and by the need of defending the faith against the numerous heresies that arose, scholars sought to organize theological beliefs on a philosophic basis and to reconcile faith and reason. It was the beginning of the scientific spirit in Modern Europe. The Scholastic Philosophy, thus developed, formed for centuries the chief subject of study in the theological schools; and its development and the ardent discussions it caused had much to do with the increasing importance of these higher schools, from which, late in the twelfth century, arose the earliest universities. Among the foremost leaders in this intellectual revival were the mendicant friars, members of the newly-formed orders—the Franciscans—founded in 1212, and Dominicans, sanctioned by the Pope in 1217. The Dominicans, in particular, turned their attention to the study of theology and to the defence of the church against heresy. The most famous exponents of scholastic philosophy, Albertus Magnus and Thomas Aquinas, were Dominican friars.

CHAPTER X

THE RISE OF THE UNIVERSITIES

About the time when Norman kings were ruling in England, many influences combined to increase the attendance at certain of the cathedral and monastic schools, and to cause their organization on a new basis. An era of comparative peace in Europe, safer and more convenient means of travel, contact with Arab civilization and its wealth of learning in Spain, contact with Eastern civilization through the Crusades, the intellectual vigour that resulted from the discussions of scholastic philosophy in the schools, the increase of wealth, the rise of towns and cities, the incorporation of guilds, and the encouragement of the church, were all important factors in the development of universities.

THE STUDIUM GENERALE

The presence of famous teachers, such as Abelard at the Cathedral School of Notre Dame in Paris, or of Irnerius at the Monastic School at Bologna, attracted thousands of students who came from every country in Europe. Such a school became known as a *studium generale* (that is, a school not restricted to local purposes), a term which by about 1250 came to be applied only to certain schools with large attendance and recognized standing. In them were teachers not only of the Seven Liberal Arts, but of the special sciences of law, theology, and medicine. The immense numbers of students (mediæval accounts, doubtless exaggerated, gave Paris 30,000 students and Bologna 10,000) made

necessary some sort of internal organization. At first the students grouped themselves into nations. These, following the example of the numerous guilds already in existence, formed themselves into organizations with definite charters granted by King, Emperor, or Pope; thus arose the *universitas*, which meant originally a "corporation." Hence, at a studium generale there might be more than one universitas. In some cases the organization was sought, not by students, but by teachers. Thus the earliest university corporations were guilds either of students or of teachers in a studium generale. The importance of the universitas in the government of the school came in time to be so well recognized that the name was eventually applied to the whole organization. Two of the earliest of these, the University of Paris and the University of Bologna, will serve as types of all.

TYPES OF UNIVERSITY ORGANIZATION

To the Monastic School of Bologna came thousands of men already well educated and not without means, attracted by the fame of Irnerius, a lecturer on Roman Law. Here the guild of students made their own rules and elected annually a rector and a council to carry out their decrees. Teachers depended for payment entirely on the fees of the students and were amenable to student regulations. In Paris, however, where the chief studies of the majority of students were either the Seven Liberal Arts or theology, the students were more numerous and much younger and less capable of self-government. Fifteen seems to have been a common age for pupils to begin their arts course. The governing body here was, accordingly, a universitas, not of students, but of teachers. The University of Paris was granted a

charter by King Louis VII of France in 1180. The Pope later granted it special privileges. Bologna was chartered as a university by Frederick Barbarossa, in 1158. By 1400 there were forty universities in Europe.

PRIVILEGES OF THE UNIVERSITIES

Encouraged for various reasons by Popes, Emperors, and Kings, the universities soon came to wield a very powerful influence independent of both church and state. They represented the highest learning of the time, both civil and religious. They were, as a rule, free from taxation and military service; they were subject, like the clergy, only to their own courts; they had the right to grant degrees which carried with them a recognition by the church of the right to teach in other centres of learning.

The most formidable weapon of the members of a University for enforcing their rights was the *cessatio*, or privilege of suspending lectures until their grievances were redressed; if the cessatio did not bring redress, it might be, and frequently was, followed by a wholesale migration of students and teachers to some other town. Thus Oxford University is said to have become prominent as the result of a migration from Paris, and Cambridge, similarly, as the result of a migration from Oxford. Migration was an easier matter then than now, for the university of that day owned no buildings, library, or apparatus. Lectures were given in rented rooms, and the average student was even less cumbered with worldly goods than he is to-day. Thus poverty enabled the earliest of democratic institution in Europe to maintain, for centuries, its rights and privileges unimpaired.

CHAPTER XI

THE RENAISSANCE IN ITALY

THE Renaissance was the name given to a movement which began in Italy about the middle of the fourteenth century and characterized the development of European history for the next century and a half. In its essential nature it was a reaction against the most dominant characteristics of mediæval life and thought—the repression of the individual, the reverence for authority in intellectual matters, and the "other-worldliness" of its religious ideals. The lowering of moral standards that characterized the later days of the Roman Empire had, for centuries, caused the finer minds of the Christian world to regard with suspicion all worldly activities, worldly success, and worldly joys. The downfall of its political institutions and the occupation of Europe by Teutonic invaders had made necessary a social and political reconstruction in which the individual, as such, had little value. He existed only as a member of some recognized association—the church, the guild, the trading company, the feudal order, the civic corporation, the monastery, or the university. Like the soldier in an army, his safety and welfare depended on union and discipline. Only by submission to authority could he find a measure of freedom.

THE REVIVAL OF LEARNING

By the fifteenth century, however, the new political and social institutions had become more firmly established. The commercial enterprise of the great Italian cities, such as Venice, Florence, and Milan, and their

long struggle for civic independence, had given rise to a spirit of energy and self-reliance which sought wider channels of thought and new ideals of life. Such ideals they found had already been realized in the life and thought of Ancient Greece and Rome, and so the most characteristic feature of the early Renaissance was a revival of interest in the art and literature of the Greek and Roman worlds. In Italy the tradition of Roman glory had never been quite forgotten. Now men turned energetically to a search for the manuscripts of its classical literature, and to an imitation of the characteristic forms of classical art. The influence of the new movement is seen in the zeal with which Petrarch, the great Italian poet, (1304-1375), attacked conceptions of scholastic philosophy still dominant in the schools, and found a nobler subject of study in the world of life and feeling around him. "Aristotle was, after all," he said, "only a man." Petrarch began that diligent search for manuscripts which, by the middle of the fifteenth century, had restored practically all that we now have of the Latin literature and much of what we have of the Greek.

Commercial intercourse between the Italian cities and the East, and the advance of the Turkish power in Asia Minor brought to Italy, from time to time, Greek scholars and Greek manuscripts. The first great impetus to Greek learning in Italy came from the lectures which Manuel Chrysoloras, one of the most famous scholars of the Eastern Empire, was persuaded to deliver at Florence from 1397 to 1400. Other scholars followed. Greek grammars were compiled, and professorships in Greek were founded in Italian universities. The collection of manuscripts and the encouragement of the new scholarships were aided by the wealth of merchant princes and the patronage of lordly rulers, such as the Medici of

Florence and the Visconti of Milan. Schools were founded at their courts, where teachers and scholars of the New Learning found generous welcome and support. Before long the wealth of Greek literature was opened to the western world.

THE SCHOOL OF VITTORINO DA FELTRE

ITS IDEALS AND METHODS

A characteristic feature of the early Italian Renaissance was its faith in education as the means of achieving its new ideals. It seemed to men, now (as in ancient times), that life on this earth offered opportunities for self-realization, and that education might point the way. This belief in the possibilities of human culture (*humanitas*) gave to the new studies the name of the "humanities." The re-discovered works of Quintilian were studied and admired more zealously than they had been in his own day. In his treatise, *De Oratore*, he had upheld the aims of moral virtue, encyclopædic knowledge, and practical ability. These, too, were the aims of the most famous educator of the early Italian Renaissance, Vittorino da Feltre (1378-1446).

Born at the village of Feltre in Northern Italy, Vittorino had been a student at Padua when the zeal for humanistic learning made itself felt there. He became one of the most famous Latin scholars of his day, and added to his wide learning a genuine piety. At the age of forty-five he was invited by the Marquis of Mantua to act as tutor for his sons, and was promised every opportunity to carry out his ideals of education. The school building, which he called "La Casa Giacosa," the Joyful House, was a roomy home, beautifully situated, with open ground and trees about it. Besides the sons of the Marquis, students came from time to time until the school

numbered fifty or sixty, many of whom were the sons of other noble families. Others were poor students whose abilities showed promise of fitness for leadership. Individual care was given to each student with the purpose of discovering his capabilities and directing his course. Always the teacher kept in view the place in life and society the student was to fill, and sought to prepare him for his future work. His ideal was the ancient ideal of the man harmoniously developed, morally, intellectually, and physically. Games and athletic exercises were encouraged. The teacher joined his students at their play and gave close attention to their physical condition. For moral and intellectual training, an all-sufficient subject was found in literature, namely, the classics of Greece and Rome and the writings of the Church Fathers. These were studied for their content as well as for their literary form. History, geography, mathematics, philosophy, law, medicine, were learned from classical authors. At the courts of other Italian princes, similar "court schools" for higher education were founded. Thus, though not without vigorous opposition, the study of classical literature replaced, in secondary education and, eventually, in the universities of Italy, the formal training in rhetoric and dialectic which had become the most important studies of the Seven Liberal Arts.

As the aims of Vittorino differed from those of his immediate predecessors, so his methods differed. Moral ends were always before him; a sincere regard for his students won their respect and affection. Pleasant surroundings, which the teacher was careful to preserve, helped to make learning pleasant, and corporal punishment was practically unknown. Vittorino himself was always held in the highest regard by the Marquis and his

family; his advice was asked on matters of state, and his practical knowledge of men and affairs gave weight to his opinions.

EMPHASIS SHIFTING FROM CONTENT TO FORM

But the humanistic movement in Italy, as it affected education, did not long hold to the high standard that Vittorino had established. In time the practical ends of training were forgotten, and the study of literature, instead of being a means of moral and intellectual development, became an end in itself. Attention was paid to the form rather than to the content. Cicero was regarded as the model of correct Latinity, and so great was the passion for literary form that, in time, Cicero became as great a tyrant in the schools as Aristotle had been. Dictionaries, grammars, phrase books, and commentaries were compiled, all on the work of this master of eloquence. For several centuries, in the north as well as in the south of Europe, this narrow conception of humanistic training, sometimes known as Ciceronianism, prevailed, and Latin grammar was by far the most important subject of study in all secondary schools. The textbooks in grammar were written in Latin, and the unfortunate school-boy was compelled to learn by heart, in a foreign language, scores of rules, the meaning of which he could not understand. Compulsion and harsh methods of discipline followed almost as a matter of course. Thus a movement, which at first was characterized by a desire for individual liberty, for a fuller mental life, wider knowledge, and a more practical training for social or political affairs, developed into a system which became, in time, as formal and almost as narrow as that which it had replaced.

THE RENAISSANCE IN NORTHERN EUROPE

It was almost a century after the beginnings of the Renaissance movement in Italy before its effects were felt in Northern Europe. When it did appear its prevailing characteristics were, in many respects, different from those which we have noticed in Italy, and its effects were more widespread. It resembled the Italian Renaissance in the stress laid on the study of classical literature, but the main aim and purpose of its great scholars was not so much individual self-development as social and moral reform. By 1450 the art of printing had been invented, and scores of books and thousands of pamphlets began to pour from the presses of Europe. This alone made possible the wide dissemination and popular effect of the teaching of the northern humanists.

THE WORK OF ERASMUS

The first advocate of humanistic training in Northern Europe was Johann Wessel (1420-1489), who had felt the influence of humanistic learning in his studies at Paris, Florence, and Rome, and who introduced humanistic studies into the schools of the Brethren of the Common Life, which then, to the number of over forty, were scattered over the Netherlands and Northern Germany. Two of his more famous students were Rudolf Agricola and Johann Reuchlin. But the most influential of all was Desiderius Erasmus, (1467-1536). Born at Rotterdam, Erasmus had, in early youth, studied at the school of the Brethren of the Common Life at Deventer, in Holland. Later, he studied at the University of Paris, and afterwards at Oxford, where he was the friend of Colet and More. Three years of travel and study in the most famous centres of learning in Italy were followed by

another visit to England, where, for four years, he was professor of Divinity at Cambridge. Here he also gave a course of lectures on Greek. His later years were spent at Basel, in Switzerland, engaged in literary work.

As Vittorino da Feltre was the foremost exponent of the New Learning in the earlier Renaissance of Italy, so Erasmus was its foremost exponent in the later Renaissance of the North. But Vittorino's influence was exerted through his labours as a schoolmaster, and he left no written record of his work. Erasmus, on the other hand, was no schoolmaster, but a most voluminous writer, editor, and compiler, and the influence of his writings in his own day was very great. His works in Latin grammar and composition were, for centuries, common texts in secondary schools. He wrote, also, treatises on *The Education of Children* and on *The Right Method of Study*. His theories of education were those of Vittorino, and of their common master, Quintilian, and he expressed contempt for the extreme Ciceronianism into which the study of the humanities had fallen. To the study of Greek and Latin classics he added the study of the Church Fathers. He laid stress on the content of literature and would learn from it history, geography, and some elementary science. He, too, advocated kindlier methods of discipline, and wished to extend the benefits of literary training to girls as well as to boys. All this was evidently impossible without teachers of the right type. He wished that men of university scholarship might find a career in teaching, but few of them shared his zeal for the cause of secondary education.

It was impossible, however, that the humanistic education could ever make its appeal directly to the masses of the people. It demanded, at the outset, a

knowledge of Latin that took years to acquire. Consequently, it could, at its best, do no more than educate leaders who might indirectly spread amongst the people the benefits of the New Learning. Education for the masses must be in the vernacular, and the possibility of that was yet to come.

CHAPTER XII

INFLUENCE OF THE REFORMATION ON EDUCATION

THE Renaissance in Northern Europe was characterized, as we have seen, by the importance attached to the idea of social regeneration by means of education. Thus its aims were less individualistic, less self-centred than the aims of most advocates of the New Learning in Italy had been. Where the Italian humanists sought to revive the life and spirit of antiquity through its literature and art and, sometimes, succeeded in reviving also its pagan sentiments and easy religious conceptions, the northern humanists sought, through careful study of the Old and New Testaments in Hebrew and Greek, and of the writings of the Church Fathers in Latin, to purify religion and to reform abuses in church and state. They saw the need of intellectual and spiritual revival, and men like Sir Thomas More, Dean Colet, and Erasmus, set themselves earnestly to the task. They believed that through the church and school the light of the New Learning might be spread and the abuses of the age be remedied in time.

EFFECTS OF REFORMATION ON EDUCATION

But the cause of the Renaissance in Northern Europe was destined early to be affected by an allied movement culminating in the Protestant revolt and reformation, led by Martin Luther (1483-1546). It was followed by revival within the church, a revival whose effects on education were most evident in the work of the Jesuit order,

and of the Brothers of the Christian Schools. The immediate concern of the historian of education is not so much with the causes that led to the separation from the Roman Catholic Church of great masses of people in Northern Europe as with the effect its results were destined to have on the theory and practice of education. These may best be shown by an examination of the educational theories of Martin Luther and his associates, of the attempts of their followers to realize them, and of the political results of the Reformation as they affected education. After a brief examination of the educational precepts of Luther and the educational work of Melancthon, the developments of educational theory and practice in Germany, in Great Britain, and in France, from the sixteenth to the eighteenth centuries, will be considered. These developments were by no means all due to the spirit of the religious Reformation as distinct from the spirit of the Renaissance. Indeed the two can not at times be readily distinguished from each other as causes of the movements described.

LUTHER'S EDUCATIONAL THEORIES

The most important principle of Luther's teaching, in so far as it affected the history of education, is the emphasis he placed on the importance of the individual judgment in matters of faith, and on the earnest study of the scriptures. Emphasizing thus the responsibilities of the individual, he was bound to urge also the necessity of giving the individual as high a degree of education as possible. Thus we find in Luther an earnest advocate of education, universal as far as possible, compulsory, if necessary, and organized and enforced by the state. In a "Letter to the German Nobles" he says:

I hold it to be incumbent upon those in authority to command their subjects to keep their children at school, for it is beyond doubt their duty to insure the permanence of the above-named offices and positions (that is, preachers, jurists, etc.) so that preachers, jurists, curates, scribes, physicians, schoolmasters, and the like, may not fail from among us; for we can not do without them. If they (that is, those in authority) have the right to command their subjects—the able-bodied among them—in time of war to handle musket and pike, to mount the walls, or to do whatever else the exigency may require, with how much the more reason ought they to compel the people to keep their children at school; inasmuch as, here upon earth, the most terrible of contests, wherein there is never a truce, is ever going on?

Luther translated the Bible into modern High German. Now, for the first time, the use of the press made it possible for these translations to be easily multiplied and put within the reach of the people. He compiled also a catechism for the young. The use of these he urged on all parents, for he saw in family life the most far-reaching means of effective moral and religious training. Besides insisting on early home education, he would have all, girls as well as boys, attend school for an hour or two a day, thus leaving them free most of the time to follow, as before, a trade or household occupation. In such schools, of course, training would be in the native tongue, not in Latin.

Though Luther's chief interest in education was in the opportunities it afforded for religious training, yet he was far-sighted enough to see its necessity even for secular affairs alone, and thus to urge popular education on

very broad grounds. For the time, however, even with the aid of the press, little could be done apart from the education of the home, which included, besides religious training, a knowledge of reading and writing German. The first necessity for public elementary schools was a supply of teachers; religious and political leaders, too, must be educated, and these were educated in the secondary and higher schools. The actual work of the German reformers was thus largely confined to secondary education.

DEVELOPMENT OF SECONDARY EDUCATION IN GERMANY

Both in Germany and in England the revolt from the Church of Rome was accompanied by wholesale confiscations of monastic lands. By some of the Protestant princes the revenues arising from these confiscations were used to found "Fürstenschule" (Princes' Schools) similar in purpose to the court schools of the Renaissance in Italy. Their chief purpose was the training of promising boys, particularly those of noble family, for leadership in religious and political affairs, then always closely associated. The number of these early state schools was small, and they were intended merely to supplement the work of the cathedral and burgher schools already in existence. They were monasteries turned into boarding schools, and the influence of monastic surroundings and traditions was evident in the daily life of the students. Several of these schools are yet in existence, though most of them were merged into the later "Gymnasien," the typical German secondary schools of modern times. These Gymnasien were developed from the higher cathedral and burg schools, which adopted a humanistic curriculum, a development largely shaped by the ideas of Melancthon and Sturm.

MELANCTHON

Philip Melancthon (1498-1560) was a nephew of the humanistic Reuchlin, who early encouraged his zeal in the study of Latin and Greek. At the age of fourteen he graduated from the University of Heidelberg and went to Tübingen, where he lectured in classical literature, rhetoric, and history, while continuing his studies in mathematics, astronomy, medicine, and law. His influence on higher education in Germany began with his appointment, in 1518, to the Chair of Greek in the University of Wittenberg. Here he came into contact with Luther, under whose influence he turned his attention to the study of theology. His own influence on the future of German education, which was exercised in various ways, was so great as to win for him the title of *Germaniae Praeceptor*. His fame as a university teacher attracted many students. Like Erasmus, he was a voluminous writer, and wrote with the definite purpose of extending humanistic education. He compiled a series of textbooks in Greek and Latin Grammar, rhetoric, dialectic, history, and physics. He had, too, great practical ability as an organizer, an ability which was in great demand at a time when the new Protestant Germany found it necessary to fashion schools for itself.

THE FIRST STATE SCHOOL SYSTEM

In 1525, Melancthon organized, for the Count of Mansfeldt, a school at Eisleben. Two years later the Elector of Saxony appointed him school inspector for Saxony, and here he laid the foundation of the first state school system. Schools were to be founded in every town and village. In the lowest class reading and writing were taught from a primer which he prepared.

Students also memorized the Creed, the Lord's Prayer, and short selections from the Latin authors. In the next class the studies were grammar and the easier Latin texts. The highest class read Vergil and Cicero, and were thoroughly drilled in the art of speaking and writing Latin. Each of these classes extended probably over several years, and in each class considerable attention was devoted to music and religious instruction. The main aim of these schools was to prepare students for the university. During the forty-two years that he remained at Wittenberg, Melancthon's advice was constantly sought by Protestant rulers throughout Germany, and the highest positions in the many schools and universities he founded or reorganized were filled by students whom he had trained. The courses which he organized in these schools were as humanistic as Erasmus could have desired.

STURM: A TYPICAL HUMANIST

One of the most famous of those who, after Melancthon, determined the course of organization and study in the German Gymnasien was Johann Sturm (1507-1589), for forty years rector of the famous Gymnasium at Strasburg. Like Erasmus, he had attended the School of the Brethren of the Common Life, where he became devoted to those classical studies which, largely through his influence, have become, since his time, the staple studies of German higher education. The Gymnasium at Strasburg was the most famous of its day, and had over a thousand students in attendance at one time. Students entered at the age of six or seven, and the course was prescribed and carefully graded for ten years.

Sturm declared the aims of his school to be "piety, knowledge, and the art of expression." For "piety"

they studied the catechism and the Creed, followed, in later years, by the writings of the Church Fathers and the Epistles of St. Paul. "Knowledge" was limited to that contained in the Latin and Greek classics, and "expression" meant expression in the language of Cicero. Greek was studied in the higher forms. It was in truth a reversion to Ciceronianism.

> While other authors than Cicero were read, the object of this training clearly was to acquire an ability to read, write, and speak Ciceronian Latin. Words, phrases, and expressions from Cicero's works were carefully committed to memory, and the main emphasis throughout was upon form, with little regard for content. The Latin and Greek were largely regarded as an end in themselves. The last three grades made a little study of rhetoric, and the highest included a little logic, astronomy, and geometry; but otherwise there were no studies besides the classics and religion. The mother tongue was neglected; no mention was made of geography, history, or natural sciences, and but little of mathematics; and there was no connection indicated between the school and the world outside. Under these circumstances it would be surprising if the chief educational methods were not those of imitation and memory.

Perhaps the narrow confines of his aim allowed for Sturm's remarkable success. His carefully organized course of study, for which suitable text-books were prepared, became, for centuries, the model for Gymnasien in Germany and for the great public schools of England.

Thus, the sixteenth century saw in Germany a triumph of the humanistic studies and the rise of the first system of state schools in modern Europe. It saw also

the organization of the most thorough system of humanistic schools yet founded—the schools of the Jesuit Order.

THE SCHOOLS OF THE JESUITS

The Society of Jesus was founded in 1540. From the beginning it was an Order of preachers and teachers, and its missionary labours are familiar to every student of Canadian history. Its aim was to establish and to spread the Catholic faith. The immense influence which it acquired made it the chief agent of that reform within the Catholic Church, which was contemporaneous with the rise of Protestantism in Germany. After more than fifty years of experience in school work, the Jesuits published, in 1599, the famous *Ratio Studiorum*, an official description of the plan and method of studies in the schools of the Society.

AIMS

The work of the Jesuits was confined to secondary and higher education. The economic conditions of the time probably made it impossible to bring education within the reach of every one. The best that could be done was to educate those who were to fill the more responsible positions in life. Never was a system of education better adapted to achieve its aim than was that of the schools of the Jesuits. For centuries great numbers of the leading men of Europe, in scholarship, literature, and practical life (both Protestant and Catholic), were graduates of these schools. The boys began the course in the lower schools, usually at about twelve years of age, and completed it at seventeen or eighteen. The course in the higher schools, which covered university work, lasted for another seven years. In all cases tuition was free, and teachers, who were, of course, members of the Order,

received no remuneration. The studies pursued were those of the usual humanistic course as described in the work of Sturm. Great importance was attached to moral and religious training, and care was taken that the graduates of these schools should not only be finished scholars, but should be practised in public speaking, and should be able to show practical results of the learning they had acquired.

METHODS

The excellence of the system lay mainly in the method by which these results were obtained. For the first time we have a well-organized system and teachers carefully trained in school method. The conduct of the school was regulated in minute detail. The great amount of memory work required by the course was offset by the care taken not to impose too much at a time. Lessons were short, often only four or five lines of the Latin text being set. Lessons were frequently repeated, and systematically reviewed; *repetitio mater studiorum* was the controlling maxim. The interest of the students was aroused by a most skilful use of prizes, rewards, and opportunities for personal distinction. Students were grouped in tens under a leader who won his position for excellence in his work, and who aided the master and heard the recitations of the younger boys. Few subjects were studied at a time. Corporal punishment was seldom resorted to, and never for failure in scholarship. It was never inflicted by the teacher, but by a "master of discipline, who must not be a member of the Society."

LIMITATIONS

The chief objection that has been raised to the method of education in these schools is that it tended to

suppress the individuality of the student and to make him conform to a type. Students were never encouraged to raise questions that did not relate directly to the matter in hand. They were to learn what they were taught. It has been objected, too, that the desire to surpass one's fellow-students and to win recognition of the fact is not a very high ideal. But their method was certainly effective, and no system of schools had ever been more popular. In the earlier part of the eighteenth century, when the Order was at the height of its power, it maintained over seven hundred schools, in each of which the attendance was counted by hundreds.

THE SCHOOLS OF THE CHRISTIAN BROTHERS

OBJECTS, STUDIES, METHODS

In 1682, more than one hundred and fifty years after the founding of the Jesuit schools, another Catholic Order was founded in France, which provided for elementary education, as the Jesuits had provided for more advanced work. This was the famous Institute of the Brothers of the Christian Schools (commonly known as the Christian Brothers), founded by St. Jean Baptiste de la Salle. A century after its foundation the Order was maintaining over one hundred and twenty schools, manned by over eight hundred teachers. The curriculum provided elementary training in reading, writing, and arithmetic, with a little Latin sometimes in the higher forms. But the main object of La Salle and the Christian Brothers was moral and religious training, rather than intellectual acquirements. In addition to religious instruction, children were taught the virtue of cleanliness, good manners, and regularity in school work. Care was taken to provide healthful physical surroundings. Instruction was given by the Brothers of the Order

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and was gratuitous. In some schools manual training and technical instruction were provided. The first normal school was organized to train teachers for these schools, in which we see, for the first time, a class of trained teachers devoted to elementary education.

Their methods of school organization, too, showed a marked advance on previous practice. For the first time we see classes organized for simultaneous or class teaching, in place of individual instruction, which was then the method everywhere in use. For class instruction pupils must be approximately at the same stage, and so the graded school followed as a matter of course. Instruction was in the native tongue, and text-books, suitable for the various grades, were written.

REACTION AGAINST HUMANISTIC SCHOOLS

We have seen that the humanistic reform of the secondary schools resulted everywhere in a system as fixed and formal as the mediæval system it had replaced. Apart from religious instruction, which was always present, education had resolved itself largely into the learning of Latin language and literature with, perhaps, a little Greek in the upper forms. How best to teach these languages was the chief problem. Attention, too, had centred itself once more on grammatical form and style rather than on the thought. Ciceronianism had come again. Against all this there was bound to be a reaction. Critics arose who asserted that the education of the day was not sufficient preparation for practical social life; that its curriculum was too narrow; that it gave no proper knowledge of the world about us; that it laid too much stress on knowledge for its own sake, and not enough on virtue and on judgment; that it neglected the development of the body; and that, even for the immediate end

it had in view, the learning of Latin, it was inefficient. Men of letters, like Montaigne, Bacon, and Locke, voiced their protests, while practical schoolmasters, like Ratke and Comenius, attempted to carry reforms into practice.

MONTAIGNE

HIS IDEAL OF A LIBERAL EDUCATION

Michael, Seigneur de Montaigne (1533-1592), was of noble birth, and in his essay *On the Education of Children*, he considers, not any general theory of education, but the education of a young man of noble family who is to take a prominent part in social and political life. He protests against the bookish education of the times; too much attention is paid to words. "Let but our pupil be furnished with things (that is, ideas)," he says, "and words will follow but too fast." He points to the result of the school training of the day—a young man, "awkward, maladroit, unfit for company or employment," and recommends, instead, the employment of a competent tutor:

> A man possessing wisdom, judgment, civil custom, a modest behaviour, rather than bare and mere literal learning. I would have him not only to demand an account of the words contained in his lesson, but of the sense thereof, and judge of the profit he hath made of it, not by the testimony of his memory, but by the witness of his life.

The student, moreover, is to cultivate a knowledge of men and of life by actual experience. He is to travel abroad in early youth under the care of his tutor. Montaigne, also, lays stress on the necessity of developing the body as well as the mind:

All sports and exercises shall be part of his study. Running, wrestling, music, dancing, hunting, and managing of arms and horses. I would have the exterior demeanour or decency, and the disposition of his person, to be fashioned together with his mind; for it is not a mind, it is not a body, that we erect, but a man, and we must not make two parts of him.

Montaigne protests, too, against the methods of discipline then in vogue:

How wide are they which go about to allure a child's mind to go to his book, being yet but tender and fearful, with the stern frowning countenance and with hands full of rods. How much more decent were it to see their school-houses and forms strewed with green boughs and flowers than with bloody birchen twigs.

He laments the amount of time spent in learning the Greek and Latin tongues—"great ornaments to a gentleman, but purchased at overhigh a rate." The main object of education, he insists, is the cultivation of virtue and of judgment by the reading of history and literature, and by carrying into actual practice in daily life the ideals of conduct and the models of virtue there learned: "A man should not so much repeat his lesson as practise it."

CHAPTER XIII

THE RISE OF THE SCIENTIFIC SPIRIT

BACON

BACON'S *Advancement of Learning* was published in 1605, his *Novum Organum* in 1620. These are his chief contributions to educational thought, and their influence in explaining and popularizing the modern scientific method can hardly be over-estimated: thus, on school practice, their influence, although indirect, has been very great. Bacon, for the first time, gave expression to enthusiasm for that knowledge of the physical world which was destined in time to share the field of educational effort with the study of literature. The scientific spirit was indeed one of the most important aspects of the Renaissance movement. Copernicus' theory of the Solar System had been published nearly twenty years before the birth of Bacon. The fifteen years that elapsed between the publication of the *Advancement of Learning* and the publication of the *Novum Organum* saw Galileo's invention of the telescope and the pendulum, Kepler's explanation of the laws of planetary motion, Harvey's discovery of the circulation of the blood, and Napier's invention of logarithms.

In his *Novum Organum*, Bacon attempts to describe his "new organ" for the discovery of scientific truths. This is the method of induction in place of the method of deduction, which was the "organ" of the dialectitian of scholastic times. In place of starting from some authoritative statement and deducting its possible conclusions, the new method was: first, to tabulate carefully the facts

of nature; then, by experiment and induction, moving from particular facts to general conclusions, the truth might be reached. The great advantage of this new method was that it was capable of being applied by any man who could free himself from preconceived notions and prejudices. Thus the discovery of the truth would not require genius, but only industry and organization.

PROTEST AGAINST HUMANISTIC IDEALS

With the zeal of the reformer, Bacon attacked the prevailing enthusiasm for Greek and Roman ideals and Greek and Roman learning. "The opinion which men cherish of antiquity," he says, "is altogether idle and scarcely accords with the term, for old and increasing years of the world should in reality be considered antiquity, and this is rather the character of our own times. As we expect a greater knowledge of human affairs and more mature judgment from an old man than from a youth, on account of his experience and the variety and number of things he has seen, heard, meditated upon, so we have reason to expect much greater things of our own age than of antiquity."

RATKE (1571-1635)

THE SCIENTIFIC SPIRIT IN EDUCATION

The first attempt to apply the Baconian principles of experiment and induction to the details of school-room methods was made by Ratke. Something of Bacon's largeness of vision may have prompted the extravagant claims that Ratke made. In a memorial to the Imperial Diet in 1612, he claimed that, by his system, he could teach any one Greek, Latin, and Hebrew, without difficulty, in the time formerly taken to teach any one

of those languages. He promised to introduce schools in which all the arts and sciences should be taught, and further investigations made, and he promised, by these educational methods, to introduce uniformity in speech, religion, and government throughout the Empire. The princes of the Diet were so impressed with this memorial that, after a commission of university professors had reported favourably on his system, he was given a chance to carry his plans into operation at Augsburg. The details of his methods show a notable attempt to place school methods on a scientific basis. The teacher must "follow the order of nature," an injunction which presupposes an attempt to study the nature of the child. Everything, he said, must proceed by experiment and investigation; the teacher must avoid rote-learning and compulsion. In learning foreign languages the teacher must start with the vernacular and confine his efforts to some short work. Frequent repetition of this must ensure a thorough knowledge before the pupil's attention was directed to other work.

He failed, however, to make good in practice the extravagant promises which his enthusiasm for the new method had prompted him to make. It remained for others, with more tact and better ability in school organization, to show the real merits of his system. His fame was soon overshadowed by that of a much greater man, John Amos Comenius.

COMENIUS

Comenius (1592-1671) was bishop of the Moravian Brethren. Thus his foremost motive in life was the advancement of religion. Early in life his attention was directed to the study of educational method. He was sixteen years of age before he began the study of Latin,

and his recollections of the method of teaching may be given in his own words:

> How intricate, how complicated, and how prolix it was! Camp followers and military attendants, engaged in the kitchen and in other menial occupations, learn a tongue that differs from their own, sometimes two or three, quicker than the children in schools learn Latin only, though children have abundance of time, and devote all their energies to it. And with what unequal progress! The former gabble their language after a few months, while the latter, after fifteen or twenty years, can only put a few sentences into Latin with the aid of grammars and dictionaries, and can not do even this without mistakes and hesitation. Such a disgraceful waste of time and labour must assuredly arise from a faulty method.

Much, therefore, of the educational work of Comenius was devoted to improvements in methods of teaching Latin.

To-day, however, the chief interest in Comenius arises from the attempt he made to organize a science of education. The study of the works of Bacon had given him an enthusiasm for universal knowledge and for the new scientific method. These two principles he sought to apply in a comprehensive manner to the problems of the school-room. The results of his work are embodied in the *Didactica Magna*. Here, the large vision of Comenius is evident both in the organization of the educational system which he proposed and in the general principles of method which he advocated.

SCHOOL ORGANIZATION

His educational system included: first, a school of infancy, a forerunner of the kindergarten; in connection with this he lays down general principles for the guidance of the mother touching the education of the child from the earliest days to the age of six; second, the vernacular school, in which all children were to be educated from the age of six to the age of twelve; here, as the name implies, instruction was to be in the native tongue; third, the Latin school, intended only for boys of ability; here, between the ages of twelve and eighteen, they were to be instructed in the Seven Liberal Arts, and also in physics, geography, history, ethics, and theology; fourth, a national university for professional training, from the age of eighteen to the age of twenty-four. To crown all, he advocated the foundation of a post graduate college, where a corps of trained scholars were to have every means put at their disposal to enlarge the boundaries of knowledge, as Bacon had desired. Up to the age of twelve education was to be universal and compulsory. Girls as well as boys were to be taught. In advocating the right of every one to a state education up to the age of twenty-four, Comenius was centuries ahead of his time.

METHODS OF TEACHING

In his principles of method, too, Comenius was distinctly modern. He advocated a course of instruction, beginning at infancy and proceeding by grades suitable to the capacities of the student at various stages. He insisted on the economy of class instruction in place of the individual instruction then everywhere in use. A few years later saw this ideal realized in the schools of the Christian Brothers in France. Wherever possible,

instruction was to begin with the study of things. His *Orbis Pictus* was the first illustrated school text. Instruction was to keep in close touch with the daily life and experiences of the student. Pupils were not to memorize what they did not understand. By rational methods such as these the necessity for harsh discipline would disappear:

> When a musician's instrument emits a discordant note, he does not strike it with his fist or with a club, nor does he bang it against a wall; but continues to apply his skill to it till he brings it to tune.

The first of Comenius' graded text-books to be published was the *Janua Linguarum Reserata*, or *Gate of Tongues Unlocked.* In compiling this he first made a list of some thousands of Latin words that were to constitute his pupils' vocabulary. These were embodied in sentences, at first simple, then complex. Each word was used only once, and in time every construction in Latin was introduced. The sentences, too, conveyed useful up-to-date information on all conceivable topics—the origin of the world, the elements, the firmament, fire, meteors, water, earth, stones, metals, trees, fruits, etc. Side by side with the Latin, in a parallel column, ran the vernacular translation. In his later years this book, amended and furnished with hundreds of illustrations, was published under the title of the *Orbis Pictus.*

ENGLISH SCHOOLS IN TUDOR TIMES

At the close of the Middle Ages both elementary and secondary education were well provided for in England, as far as the numbers of the various educational institutions were concerned. For secondary education there were the cathedral and collegiate church schools, endowed grammar schools, like Eton and Winchester;

guild and burg schools; and hundreds of chantry schools, many of which did advanced as well as elementary work. For elementary education there were the song schools, maintained by the church, the hospitals and chantry schools, besides many dames' schools and other small private ventures. The young noble had his private tutor and, as in the days of chivalry, the advantage of residence in some courtly circle.

ASCHAM (1515-1568)

The influence of the Renaissance in England has been noticed already in the work of Sir Thomas More, of Erasmus, and of Dean Colet, who founded St. Paul's School in an attempt to realize the humanistic ideal. The influence of the humanistic movement, too, is evident in the work of Roger Ascham, the tutor of Queen Elizabeth, and the author of the first treatise on education ever written in the English language. *The Schoolmaster*, as he called his book, is noteworthy for the kindly discipline it urges, and for the admonition to study the disposition of the student, even more than for the reforms it advocated in the teaching of Latin. His method of teaching Latin was based on the principle of double translation:

> The waie is this. After the three Concordances learned, as I touched before, let the master read unto hym the Epistles of Cicero, gathered togither and chosen out by Sturmius, for the capacitie of children. First, let him teach the childe, cherefullie and plainlie, the cause and matter of the letter: then, let him construe it into Englishe, so oft, as the childe may easilie carie awaie the understanding of it: Lastlie, parse it ouer perfitlie. This done thus, let the childe, by and by, both construe and parse it ouer againe: so,

that it may appeare, that the childe douteth in nothing that his master taught him before. After this, the childe must take a paper booke, and sitting in some place, where no man shall prompte him, by him self, let him translate into Englishe his former lesson. Then shewing it to his master, let the master take from him his latin booke, and pausing an houre, at the least, then let the childe translate his own Englishe into Latin againe, in an other paper booke. When the child bringeth it, turned into latin, the master must compare it with Tullies booke, and laie them both togither: and where the childe doth well, either in chosing, or true placing of Tullies wordes, let the master praise him, and saie here ye do well. For I assure you, there is no such whetstone, to sharpen a good witte and encourage a will to learninge, as is praise.

ENDOWED PUBLIC SCHOOLS

We have seen that in Germany the Protestant Reformation resulted in the organization of the first school system under the control of the state. We have also seen that in France reform within the Catholic Church resulted in more widely extended systems of schools under the control of religious orders connected with that church. In England, on the other hand, no system at all arose. The confiscation of religious endowments by Henry VIII and Edward VI closed over three hundred schools dependent on these endowments. By the end of Elizabeth's reign, however, the loss to secondary education was fully made up by private schools and by the foundation of, or re-endowment of, public schools, by the state or by wealthy churchmen, trading corporations, or merchant princes.

In these public schools the teachers were under the control of the Established Church, and great importance was attached to religious instruction. The course of study was similar to that of Sturm's Gymnasium: they were pre-eminently classical schools. In all of them, as in the school of Vittorino da Feltre, out-of-door sports were a prominent feature of school life. In most cases they maintained preparatory classes for elementary instruction. Otherwise, the education of younger children was left to dames' schools or other private institutions, or to charity. Not until the foundation of the Society for promoting Christian Knowledge, in 1699, was any organized attempt made to grapple with the problem of popular instruction.

LOCKE (1632-1704)

HIS EDUCATIONAL THEORIES

The most notable English contribution to the theory of Education between the time of Bacon and that of Herbert Spencer was the work of the English philosopher, John Locke. Educated at Westminster, one of the great public schools, and at Oxford University, Locke had had practical experience of the usual agencies of higher education in his day. He had felt the influence of the new scientific spirit, and had become proficient in medicine. To his studies in psychology he added ten years' experience as physician and tutor in the family of the Earl of Shaftesbury. He took no inconsiderable part in the public affairs of the times, and the banishment of Shaftesbury led to Locke's withdrawal to Holland for safety's sake, whence he returned in the train of William and Mary in 1688.

THOUGHTS ON EDUCATION

IMPORTANCE OF PHYSICAL TRAINING

His *Thoughts on Education* is an attempt not to organize a science of education, but to give practical advice to a friend concerning the education of his son. As in the case of Montaigne, he is dealing with only one phase of education, the training of a gentleman's son to fill his proper place in society and in the state. Even more than Montaigne, whose ideas had much influence on him, he lays stress on the need of physical training. "A sound mind in a sound body is a short but full description of a happy state in this world"; so he begins his book, of which the first twenty pages are devoted to the topic of bodily health. Characteristic features of his system are his insistence on plenty of open air, exercise, and sleep, hard beds, plain diet, no strong drink, very little or no medicine, not too warm or tight clothing, cold baths, and the early hardening of the child's body by gradually accustoming it to cold and wet.

AIMS

Given a sound body. The great work of a Governor, is to fashion the Carriage, and form the Mind; to settle in his Pupil good Habits and the Principles of Virtue and Wisdom; to give him by little and little a View of Mankind, and work him into a Love and Imitation of what is excellent and praiseworthy; and, in the Prosecution of it, to give him Vigour, Activity, and Industry. The Studies which he sets him upon, are but as it were the Exercises of his Faculties, and Employment of his Time, to keep him from Sauntering and

> Idleness, to teach him Application, and accustom him to take Pains, and to give him some little Taste of what his own Industry must perfect.

The essential things are virtue, wisdom, breeding, and learning, and of these learning is last and least in his estimation. Virtue is to be sought by the formation of good habits; by practice, not by precept:

> Let therefore your Rules to your Son be as few as possible, and rather fewer than more than seem absolutely necessary. For if you burden him with many Rules, one of these two Things must necessarily follow: that either he must be very often punish'd, which will be of ill Consequence, by making Punishment too frequent and familiar; or else you must let the Transgressions of some of your Rules go unpunish'd, whereby they will of course grow contemptible, and your Authority become cheap to him. Make but few Laws, but see they be well observ'd when once made. Few Years require but few Laws, and as his Age increases, when one Rule is by Practice well establish'd, you may add another.

Wisdom is the ability to manage one's worldly affairs well. The essential for good breeding is to learn "not to think meanly of ourselves and not to think meanly of others." Given a proper spirit, the details of good breeding will come to the pupil with little effort.

INTELLECTUAL EDUCATION

In dealing with the intellectual education of the child, Locke voices the usual protest of the educational reformers of the day against the time given to books,

especially to the learning of Latin and the waste that ensued from faulty methods:

> You will wonder, perhaps, that I put Learning last, especially if I tell you I think it the least Part. This may seem strange in the Mouth of a bookish Man; and this making usually the chief, if not only bustle and stir about Children, this being almost that alone which is thought on, when People talk of Education, makes it the greater Paradox. When I consider, what ado is made about a little Latin and Greek, how many Years are spent in it, and what a Noise and Business it makes to no Purpose, I can hardly forbear thinking that the Parents of Children still live in fear of the Schoolmaster's Rod, which they look on as the only Instrument of Education; and as a Language or two to be its whole Business. How else is it possible that a Child should be chain'd to the Oar seven, eight, or ten of the best Years of his Life, to get a Language or two, which, I think, might be had at a great deal cheaper rate of Pains and Time, and be learn'd almost in playing?

He urges the essentially pleasurable nature of the learning process, and pleads for milder discipline based on a knowledge of child nature. Like Montaigne, he considers some knowledge of Latin essential to a gentleman, but other subjects should come first. After learning his own language the pupil should learn next the language of his nearest neighbour, that is, French. This should be learned conversationally. Then might come Latin. For learning Latin he recommends the use of interlinear translations and of conversation. Technical grammar he would not teach the child. Further, his curriculum would include arithmetic, geometry, history, and geography. Mathematics is of value, not only for itself,

but because it trains the reasoning faculties. Science is of value because it "accustoms our minds to all sorts of ideas and the proper way of examining their habitudes and relations."

EDUCATION AS A DISCIPLINE

The nature of Locke's psychological teachings, as contained in his work, *On the Conduct of the Human Understanding*, his insistence on the importance of habit, and his brief references to the effects of the study of mathematics and science, have led many to consider Locke as the first exponent of the modern disciplinary theory of education, that is, the theory that the thing taught is not of so much importance as the process of learning and its lasting effects in developing general capacity.

No other English writer on education has had so widespread an influence as Locke. His writings were translated into German by Campe, and directly influenced Basedow. His indirect effect was greater, for much of the inspiration of Rousseau's *Émile* was drawn from his theories.

CHAPTER XIV

THE ENLIGHTENMENT MOVEMENT

FRANCE was the most influential nation of the world during the seventeenth and eighteenth centuries. The foreign policy of other powers was directed towards attempts to check her schemes of territorial aggrandizement and to prevent her interference in the domestic affairs of other countries. France arrogated to herself a dictatorship in other than military and diplomatic matters. Paris was the seat of fashion and elegance. The French literature of the seventeenth century, polished and artificial, assumed a superiority over that of other lands. The King and his court delighted in gorgeous and extravagant entertainments, and the church stood in strong alliance with the ruling classes.

A SPIRIT OF UNREST

For a long time before the sixteenth and seventeenth centuries there had been, however, an under-current of discontent with the absolutism and the privileges of the church and court parties. The first organized protest was the Enlightenment Movement. The leaders of this movement, of whom Voltaire was the chief, attacked in trenchant fashion the absolutism, the hypocrisy, the superstition, and the luxuriousness of the life about them. They claimed that man's reason should be the sole guide in matters of conduct. Liberty of conscience and justice in the state were the principles for which they contended.

But Voltaire and his associates were not less selfish than those whom they attacked. They felt little sympathy for the common people; they made few efforts in their behalf. This new aristocracy of intellect considered the lot of the great masses of mankind as hopeless, while the old aristocracy continued to exercise its feudal and paternal privileges over its dependents. The Enlightenment Movement sought to destroy the old religion and had only atheism to leave in its place. This spirit of rationalism and cold cynicism towards the established social and religious ideals aroused the opposition of the older privileged classes to the new aristocracy of intellect.

NEW DANGER

There was, however, a more dangerous current of discontent than the Enlightenment Movement. It was all the more dangerous to those in authority because it seemed so negligible. There had been for a long time "a motion toiling in the gloom" which vaguely felt that the existing fabric of social, political, and religious institutions had been formed in the interests of the higher classes alone; that conditions were not such as God had designed; and that the common man had powers within himself to work out his own destiny if he had a chance.

ROUSSEAU

The first to give expression to this general dissatisfaction was Rousseau. He not only plainly stated the case, but enforced the argument with brilliant rhetoric, fervour, and sincerity. His writings were revolutionary. Institutions that were honeycombed by abuses fell at his onslaught. Beliefs and conventions were probed by pitiless inquiry. Philosophy, education, politics, religion,

and literature were profoundly affected by his epoch-making books. In the case of no other man does the knowledge of his biography become so indispensable to a thorough understanding of his work. His merits, his failures, his inconsistencies, his absurdities, have their counterparts in the schemes which he proposed or with which he was identified.

Jean Jacques Rousseau was born in Geneva in 1712. His early years were spent in irresponsible idleness, in reading romances, and in dreaming his time away. At sixteen years he ran away from his employer and became a vagabond. It was during these years of aimless wandering that he developed the characteristics that were to make him famous. He learned to love nature with an intensity which brought him to believe that there existed in nature a spirit—in sky, in stream, in forest—with which his own spirit could hold communion. He was brought also into contact with those who toiled amid scenes of beauty which they could not enjoy, and was led to feel a sympathy for these toilers and to appreciate their hard lot. In a life full of inconstancies he was never inconstant to his early sentiments in regard to the glories of the country and the sadness of the life of the toiler in the fields.

The first thirty years of his life were spent in idleness, self-indulgence, and sensual gratification. He then went to Paris, where he made an unsuccessful attempt to teach music, but had the good fortune to make the acquaintance of many brilliant and influential people. Among them were some of the leaders of the Enlightenment Movement. About this time the Dijon Academy offered a prize for an essay on the question: "Has the progress of the Arts and Sciences contributed to corrupt or to purify morals?" Rousseau says that on reading the

question he saw a new universe and became a new man. On the advice of his friends he determined to compete for the prize. He claimed that the Arts and Sciences had corrupted morals. He contrasted the Arcadian bliss of the natural man, before the coming of the Arts and Sciences, with the ostentatious superficiality and the hopeless distress of the life around him. His fervid rhetoric won for him the prize, and this induced him to enter upon a literary career, of which the fruits were an essay on *The Origin of Inequality among Man*, published in 1754; a romance called *The New Héloise*, published in 1761; *Émile* and *The Social Contract*, published in 1762; and his *Confessions*, published towards the close of his life.

The publication of *The Social Contract* and *Émile* brought a storm upon his head. Included in the *Émile* was a dissertation on natural religion which Rousseau puts into the mouth of a Savoyard Vicar whom he had met in his wanderings. These books incensed not only the Roman Catholic and the Protestant clergy, but also the French Government and the Genevan authorities. Rousseau was driven from place to place, and at last took refuge in England with David Hume. His extreme sensitiveness and his capricious pride made him misinterpret every kindness that was shown him by his friends. His actions in his later life would suggest that at times he was insane. His later years were passed in a cloud of poverty, estrangement, and bitterness. He died in 1778 and was buried (as he had wished) amid the scenes of rural beauty which he had loved so well. Sixteen years later, amid the exultation of the Revolutionists, his dust was removed to the Pantheon, where lie the ashes of those whom the nation delights to honour.

THE SOCIAL CONTRACT

Of the works mentioned in the preceding paragraph that which has most profoundly modified the theory of government is *The Social Contract.*

Napoleon said that without this book the French Revolution would have been an impossibility. Indeed the Declaration of Independence of the United States of America was based on certain teachings contained in it. It discussed the origin of government and the right of subjects to revolt when rulers neglect their duties and resort to tyrannous measures. It suggested schemes by which the will of the whole people should become paramount.

ÉMILE

But it is with *Émile* that the teacher is most deeply concerned. The reader of this educational classic must consider its principles with a very judicial mind. He will find much exaggeration and many impracticable theories. He will also find in it many sensible suggestions and will recognize many pedagogical principles which are now generally accepted, but which in Rousseau's day were regarded as absurdities. Rousseau says: "Take the reverse of the accepted practice and you will almost always do right." His is called the *naturalistic* method, to contrast it with the artificial and routine practices of the schools. Émile is to be educated in the country, not in the city; he is to learn from things rather than books; his natural instincts and feelings are to be encouraged, not thwarted; he is to be trained to be a man rather than a citizen.

Émile is introduced as a rich orphan, whose tutor is to plan for the child's education without interference from

others. At the outset Rousseau gives some very wholesome advice to parents. He condemns the practice of delegating the rearing of the child in these important years to nurses and favourite servants. He shows that there is no more sacred and delightful duty for the parents than the education of their child; and that no other duty or human consideration should relieve the parents of this responsibility.

He would treat the infant in a more natural manner than was then the custom. He condemns swaddling clothes, narrow cradles, and the rocking of children. He would let the child use its limbs and its vocal organs freely. He would not pamper it, but would expose it to a reasonable amount of heat and cold, so that the child might grow up hardy and robust. Neither would he attend to its every cry, for if the parent waits upon the child it will exercise its capricious tyranny over him, and both he and it will be unhappy. This criticism by Rousseau was the means of directing the attention of educators to the proper treatment of children, and the changed attitude which resulted has developed into an intelligent study of the child's whole nature.

The reader will notice that Émile is to be educated in the country away from any society. Rousseau rightly shows that the child's natural desires and tendencies adapt themselves to environment, but he has chosen an impossible environment. Few people can be reared under such conditions as Rousseau describes. Our lives must be spent in close relationship with others; we must enter into social relationship with others. We must learn our rights, duties, responsibilities. We must learn to adapt ourselves to a very complex civilization, so that we may be successful ourselves and still be serviceable to our fellow-men. The child who has lived with no

associates but his tutor will not adjust himself readily to the social conditions in which he must live.

The old schools had looked upon the child's inclinations as fundamentally bad, and had sought to eradicate this evil nature by severe methods of discipline. The naturalistic method would reverse this procedure. The child's natural instincts were not to be thwarted. Perhaps the modern educator owes more to Rousseau for his optimistic faith in the inherent goodness of the child than for any other particular phase of his educational theories. Education was to be based on the cultivation of the child's instincts and capacities. Sympathy, encouragement, and good environment were to be the main forces for development of character. This encouragement of the good within the child was not to be accomplished by preaching or reasoning. He argued that the abstract reason of the child does not awaken for a number of years.

Although Rousseau went too far in his condemnation of all preaching, yet the modern teacher is in agreement with him in showing little faith in the efficacy of much preaching to little children. The teacher therefore strives to inculcate moral lessons by the inspiring examples of biography, by teachings from literature, and by illustrations from opportune circumstances in the class-room or on the playground.

As regards reason, Rousseau affirmed the child's ability to reason about concrete things, and, accordingly, he would give the child numerous opportunities for reasoning about things in connection with nature study, elementary physics, astronomy, home geography, manual construction, measuring, weighing, and constructive geometry. He would not, however, require of him any deductive reasoning of the type, for example, of Euclid's

propositions, but instead would familiarize him with the geometry of the rule and the compass. Here, too, the modern teacher agrees with him in not requiring abstract inferences and deductions in primary classes.

But we must part company with this indolent philosopher when he proceeds to urge that the child's instincts should not be controlled by authority or punishment. We know that good instincts are hardened into habits by encouragement, and that vicious tendencies are checked by reproof. We must admit, however, the necessity for his protest against the extreme severity of the schools of his day, and we should feel indebted to him for the suggestion that we should seek the cultivation of the generous impulses of the child.

But Rousseau did not urge, as many of his critics seem to suppose, that the child's desires should not be restrained. On the contrary, Rousseau declares that the child's desires must be restrained, for the reason that man's unhappiness is caused by the excess of his desires over his power of gratifying them. But this restraint is not to be brought about by authority or by reasoning, but by the inconveniences naturally arising from the actions themselves. Closely associated with this is his theory about the discipline of consequences. He claims that if the child breaks a window, we should let the wind blow upon him till he suffers. His punishment will then be the natural and necessary consequence of his wrong-doing. This theory was afterwards advocated by Herbert Spencer in his moral education. It may be used in moderation, but it is often impracticable in school discipline, and may become inhuman in its severity. Moreover, the discipline of consequences may develop prudence, it does not inculcate any high form of morality.

CHILDHOOD FOR ITS OWN SAKE

In this book we hear for the first time the theory advanced that childhood exists for its own sake: "Nature desires that children should be children before they are men." The child's natural inclinations should be studied so that his occupations may be congenial to his age and abilities. Rousseau condemned the disregard by the old school of the study of the child. The formal education of the past had regarded the child as a miniature adult. He was given a man's studies, and was supposed to have the same interests and purposes as an adult. Education was a preparation through successive stages for a future which he might never reach. "What must we think," ask Rousseau, "of the barbarous education, which sacrifices the present to the uncertain future, which loads a child with chains of every sort, and begins by making him miserable, in order to prepare for him, long in advance, some pretended happiness which it is probable he will never enjoy?" Rousseau shows that the child seeks not to enter the adult life, but to participate in the life around him. Each stage of human life is as important as manhood. Education is a process of development or growth that begins at birth and lasts till the end of life. Each stage must have its appropriate interests and studies, and must bring its own satisfaction. These successive stages, according to Rousseau, include five periods of development; the first embraces the infancy of the pupil, the second extends to his twelfth year, the third to his fifteenth, the fourth to his twentieth, and the fifth includes his marriage. But this division of the stages in Émile's life is too artificial, inasmuch as the child's interests and tendencies merge imperceptibly into newer forms in the process of his development.

In this demand for a careful study of the child, the influence of Rousseau on his successors was very important. From his suggestion has sprung a scientific study of child life. The course of study, the parts of each subject to be studied, the method of teaching, are now considered from the viewpoint of the child's interests and activities. Rousseau's knowledge of the life of the child was inexact, but the great psychological reformers who succeeded him have gone a long way towards completing the task which he began.

INTELLECTUAL LIFE

Émile's intellectual powers which have, up to the age of twelve years, been limited to caring for his physical well-being have, when this period is reached, far outgrown their task, and the surplus of power now seeks out new channels of effort. He seeks information about things, not for the sake of display of learning, nor for the social advantages that will come from its acquisition, but from natural curiosity—the innate desire to know things for the sake of the satisfaction which the knowledge itself brings. This method is very different from Locke's intellectual education by the formation of a habit of thought through exercise and discipline.

INTEREST

The doctrine of interest as recommended by Rousseau has great influence to-day in determining the subjects and methods of instruction in primary education. The purpose of the old education was to strengthen the power of the will, the power of voluntary attention, so that the child might be prepared to overcome life's difficulties. Perhaps modern educators have gone to the extreme in following Rousseau's precepts, with the consequent sacrifice of much virility of mind. Interest is to be

regarded as very important in the primary grades of the public school, but in the senior grades interest and effort must be harmonized and co-ordinated to fit the pupils to attack and overcome with willing minds the tasks of real difficulty.

BOOKS

Rousseau throughout *Émile* showers contempt on the knowledge gained from books: "I hate books; they merely teach us to talk of what we do not know." Yet his own fame and usefulness are almost entirely due to his books. By this denunciation he set a fashion that has continued from Wordsworth down to the magazine writers of the present day. He would have the children know new facts, and these should be discovered by their own investigations. For these investigations, the child is to make his own simple apparatus and must begin his inquiries with the common phenomena of his own neighbourhood. He is thus set free from all dependence upon books. Doubtless there was, in Rousseau's day, too much emphasis placed on verbal distinctions and conventional knowledge derived from books, but he would not have so grossly exaggerated the truth if he had been content to say that knowledge acquired at first hand is to be preferred to that acquired by the study of books. To follow him literally is to dispense with the accumulated wisdom and experience of the ages, and to place the modern child in the position of our primitive ancestors.

The foregoing doctrines raised the question: *What knowledge is of most worth?* Rousseau's answer is, the useful and the practical; that is, the facts and phenomena of nature. He thus came to the support of the Sense-realists and was a forerunner of the modern scientific group of educators.

INDUSTRIAL EDUCATION

But it was more as a pioneer in manual and industrial education that Rousseau was distinguished. Émile will learn a trade so that he may be independent of the vicissitudes of fortune and be free from the prejudices against such occupations. Here is foreshadowed the theory of the need of the harmonious development of all our powers of body and of mind, of manual dexterity, of the senses, of judgment and reflection. In such work the exercises of the body and of the mind serve as correlatives to each other. It was left to Froebel, however, to discover that material is to be given to the child to see what he can do with it, that he may make manifest by this material the thought that has been lying dormant within himself.

SOCIAL LIFE

During the years from fifteen to twenty, Émile's social nature is to be cultivated. He is now to be brought into contact with men. He now learns his true relationship to others. He must relieve distress, protect the weak, and seek to bring peace among men. He must not become an incubus on society; he must contribute by his labour to his own support. These principles are the foundation of our modern social education; but it cannot be doubted that the introduction of Émile into society has been deferred too long. Émile's early non-social life will have rendered him unfitted for easy adaptation to his social environment.

RELIGIOUS EDUCATION

Still more surprising than Émile's long-deferred entrance into society are Rousseau's views concerning religious education. Émile is to know nothing of God or of his own soul till adolescence. Rousseau claims

that, if his religious education is begun earlier, he will learn only verbal forms and miss the higher spiritual conceptions that will now come to him with force and illumination. He claims that, as primal impressions are lasting, many of the distorted ideas of Deity are the consequences of attempting to give conceptions of God to the child mind; but experience has shown that the earlier years of the child have always proved the best season for implanting deep and permanent religious convictions. Rousseau has always contended for the progressive development of the child's powers. He has apparently not observed, however, that the child's knowledge also progresses from vague notions to definite ideas. The vague notions of religion are the most suitable for childhood, and are the sure foundation for that more definite knowledge which is to be chastened and clarified with succeeding years.

In his chapter on the education of Sophie, who is to be the wife of Émile, Rousseau's radicalism and naturalism in education disappear. His views are far behind those of modern advocates of the higher education of women. Sophie is not educated for herself but for her husband. Her education is to be domestic and religious; but it is to be artificial, and suited for one in a subservient position.

The *Émile* suggested two directions of educational endeavour. In the first place Rousseau's work, while having in view the education of a young aristocrat, suggested a scheme that might be adopted for the common people. His *The Social Contract* had proclaimed that the common man, if given opportunity and encouragement, might raise himself from his low condition. Thoughtful people who recognized the rights of the common people saw in education a means not only for

the betterment of the individual, but for the progressive improvement of the whole national life, without jeopardizing national institutions that were worthy to be maintained. Such an education would fit the people for self-government. Through it they would learn to govern themselves with judgment and moderation. They would learn to respect the rights and property of their neighbours. Such an aim as is here described is the basis of the social tendency in education. This tendency would make education universal. It is upon such a conception of the rights of the individual and of the advantage to the state of an enlightened citizenship that our system of state schools and our compulsory attendance enactments are based.

From a consideration of this work it seems clear that Rousseau was much more preoccupied with the discovery and statement of educational principles than with the laying down of any definite plan of procedure. That he exaggerated the application of many of these principles is perhaps to be regretted; but this very exaggeration attracted all the more attention and proved a greater stimulus to investigation than a more moderate and more sane exposition.

CHAPTER XV

THE PSYCHOLOGICAL SCHOOL

A MERE return to nature, such as Rousseau has described, is too revolutionary. It would give an education little better than that of the savage. We are "the heirs of all the ages, in the foremost files of time," and we must not neglect the accumulated wisdom of our ancestors. Whilst nature must always, under any system, be the chief educative force, she must be guided and controlled by the agency of the skilled educator, who can, however, only succeed in his task through obedience to her laws.

Rousseau's suggestion that instruction should follow the natural method has, accordingly, caused some advanced teachers to seek out a method in harmony with the laws of nature, by which the development of the natural powers of the child should proceed in the slow and durable manner of the growth of the plant. This second result of Rousseau's naturalism is the work accomplished by the Psychological School.

The teachers of this School strove to observe the natural capacities, interests, and activities of the child. By experiment they sought the proper studies, the suitable parts of these studies, and the gradation of difficulties to the child's powers. They traced the connection between the different studies, so that unity would replace the unrelated content of the former curriculum. These teachers gave a new and practical value to the study of Psychology. The emphasis they placed upon this subject causes the historian to designate this group of teachers as the Psychological School, and their attitude as the Psychological Tendency in education.

Leaders of the Psychological School

Pestalozzi, Herbart, and Froebel are the great leaders in this movement. Each had a number of followers and associates, who greatly assisted him in his work, and each has had in later days his admirers and disciples, who have adapted his work to modern conditions.

Their teaching holds a middle place between the thoroughgoing naturalism of Rousseau and the artificialities of the old education, which regarded the child from the viewpoint of the adult, and which too often imposed great tasks in the memorization of mere words. The Psychologists resembled the Realists in their demand for realities, not symbols, but they differed from the Realists in their interest in elementary education, in their sympathy with the child, and in their attempt to view the world through the medium of the experience, the interests, and the emotional life of the child.

PESTALOZZI (1746-1826)

Pestalozzi was the first of the Psychologists, as well as of the Sociologists. He was born in Zurich, Switzerland, in 1746. He was descended from a Protestant refugee from Italy who had come to Switzerland. His father died when he was five years old and left the family in poor circumstances. His mother was an excellent woman whose teaching and struggles left an ineffaceable memory on the heart of her son. In his writings his mother's influence can be easily recognized. The mother, accordingly, is to be the ideal teacher, and Pestalozzi's efforts in pedagogy aim to reduce the methods of teaching to such simplicity that all mothers will be competent to teach their own children.

His early career was marked by failure in several enterprises which he had undertaken. He married Anna Schulthess, a lady of culture and means, who admired him for his enthusiasm; and he at once embarked upon an agricultural scheme at Neuhof, where he attempted to teach his country progressive methods in farming by reclaiming some waste land. But his agricultural work became entangled with a philanthropic aim. He brought a number of beggar children into his household to have them taught agriculture and spinning, so that they might lead profitable and useful lives. We see here that his first educational work was social. He worked diligently and unselfishly, but he had neither financial nor executive ability, and the enterprise was a failure. The children were greatly improved by his kind and intelligent treatment, but they were generally coaxed away from him by their worthless parents as soon as they became useful. He was engaged in this work from 1775 to 1780.

After his failure at Neuhof he became a writer. In this period, extending from 1780 to 1801, he published *Evening Hours of a Hermit*, 1780; *Leonard and Gertrude*, 1781; *Fables*, 1791; *How Gertrude Teaches her Children*, 1801; *The A B C of Sense Perception*, 1801.

ORPHAN SCHOOL AT STANZ

In 1798, certain events connected with the French Revolution opened up for a brief space a new field of usefulness to Pestalozzi. The Swiss reformers had invited the Revolutionists in France to relieve the Swiss nation of the oligarchical control of powerful families and rulers. The French overthrew the Swiss armies with great bloodshed and devastated the whole land. The new Swiss Directorate was at a loss to care for the destitute orphans, so they readily agreed to the proposal of Pestalozzi to

found an orphanage at Stanz. Here he gathered from eighty to one hundred orphans in a convent. These children were idle, illiterate, vicious, filthy, and diseased. He had to meet the opposition of the people of this district, who looked upon him as an agent of the Revolutionists. These people were Roman Catholics, and he was considered an emissary of the Protestant church. But he succeded in gaining the approval of the priests and nuns, who soon recognized his meritorious work. He lived with these children. Good food and cleanliness brought health to them. His kindness and courtesy were repaid by the children with affection and gentler manners. Some of the older children helped him with the care and instruction of the smaller ones. True, it was a noisy school, if judged by our standards, and he made but little progress in developing his methods and doctrine. He showed, nevertheless, how the school can become a transformed home, and to how great a degree kindness, cleanliness, and proper food can improve the character. The return of the army, however, forced Pestalozzi to leave the convent, which was needed as a military hospital.

SCHOOL AT BURGDORF AND YVERDUN

From 1799 to 1805 Pestalozzi conducted a school at Burgdorf, where he had the co-operation of three remarkable teachers, Kruesi, Buss, and Tobler. Here he had an opportunity of testing by experiment his educational theories and of modifying them to accord with the child's natural aptitudes, interests, and capacities. The Government looked upon this school with such favour that it was made a training school for teachers.

In 1805 the school was transferred to Yverdun, where it flourished for many years. Here, in addition to the

assistant teachers already mentioned, he was joined by Niederer, a philosophical teacher, and Schmidt, a man of iron will, executive ability, and great skill as a teacher of mathematics. This Institute became very famous. It was visited by travellers from other parts of Europe and from America. Its great success caused the King of Prussia to adopt the Pestalozzian methods in education, when he set himself to restore the civil life of his country, after the disastrous struggle with Napoleon. Teachers were sent by him to Yverdun to study the new methods. Individual teachers from different lands carried away some at least of Pestalozzi's principles; thus his ideas were disseminated throughout the world. But his own staff quarrelled among themselves. Schmidt's influence over Pestalozzi increased with the latter's declining years. The other teachers could not endure Schmidt's arrogance, and in 1825 the Institute, after a career of varied successes and failures was closed in utter disaster and financial ruin.

HIS DOCTRINE, AIMS, AND METHODS

Pestalozzi's aim was to improve society by improving the condition of the lower classes through education of a practical nature and a training in industrial pursuits. As the intellectual status of the people was improved, and as their material prosperity was increased, he believed that the demand for popular liberty would grow, and the people's power of self-government would increase. These social and economic blessings he believed would be accompanied by a higher morality and contentment.

If Pestalozzi was social in his aim, he was psychological in his methods. His educational doctrine is founded on the principle that education is a process of organic growth. It is the "natural development of the inherent

powers and capacities of the child." It is the development of these powers from within, not by an accretion of knowledge that may only dwarf the natural powers. The aim of education is to increase the powers of the mind rather than to furnish stores of information. Pestalozzi compares the organic development of the child's physical, mental, and moral nature to the growth of a plant through trunk, branches, twig, and leaf, each part growing in harmony with the others.

The physical nature is to be developed through the practice of gymnastic exercises which will give increase of bodily power.

Moral culture is to be brought about by the unfolding of the will through love and confidence. Each moral faculty must be strengthened by exercise, as in the case of physical education. All faith must come from the first act of faith, all love from the first promptings of love. From his mother the child learns love, gratitude, obedience, and truth. When he feels his own independence, so that he no longer needs his mother, she points the way towards God. Pestalozzi felt that religion may thus be more effectually taught than by reliance on dogmatic instruction.

SCIENTIFIC STUDY OF MIND

Intellectual education is also dependent upon exercise. The reason will develop through clearness of perception. Since education is a process of organic growth, the teacher must know the natural laws of the development of the child's mind. Pestalozzi thus set the example for a scientific study of the mind and its processes of learning, and on this rests his great fame as an educator. From this study the great principles controlling education have been formulated. It is true that Pestalozzi's knowledge of

psychology seems very imperfect and unscientific, but his name stands for the first milestone in practical psychology, the study of the child, and the foundation of methods of education upon the results of such study.

Pestalozzi would begin the child's education with a cultivation of the senses. Sense perception is to be the basis of all knowledge. The child's instruction is to begin with his immediate surroundings. The object must be closely observed; clearness of view gives clearness of ideas. When the child has laid the foundation of precise and clear knowledge, he advances rapidly in knowledge, power, and independence, through his own interest and self-activity. In this respect Pestalozzi shows as much hostility to the old training in mere words as Rousseau or the Sense-realists. He showed the futility of the study of words before any experiences had been acquired of the things they represented. He condemns the mere memorizing of definitions and the lack of unity in subject-matter.

OBJECT LESSONS

Pestalozzi may be called the originator of object lessons. These lessons have had great vogue throughout the world and, within recent years, in Ontario. Though the object lesson does not now stand as an isolated subject on our programme of studies, it is as frequently employed as it ever was, notably as the preparatory step in the nature study, elementary science, or geography lesson. It possesses all the virtues of sense training; it makes use of things in the child's immediate environment as the media of instruction. If objects cannot be introduced into the class-room, or obtained in the neighbourhood, pictures, models, etc., are employed as substitutes.

The two permanent elements of all objects are form and number. The essential qualities of the object must be separated from those that are merely accidental. Language must be associated with these permanent qualities to give clearness and fixedness to the ideas. Pestalozzi agrees with Comenius and others in the gradation of the subject-matter from simple to complex, from concrete to abstract, from near to remote, from particular to general. These gradations in difficulty must keep pace with the child's mental development, and here again the teacher must be able to estimate the child's powers and the suitability of the material to be offered.

Pestalozzi was far from making his pupils' minds receptacles for the storing of knowledge. The child should be active, constructive, inquisitive. The doing of things was emphasized as the basis of power, self-reliance, and character building.

Pestalozzi's methods produced the best results in arithmetic, drawing, writing, reading, spelling, geography, and nature study. Concrete material was introduced into the class for clear explanation of processes in arithmetic, and the topography of the neighbourhood furnished the materials for the early lessons in geography.

SPIRIT OF THE SCHOOL-ROOM

The schoolmaster of former years was barbarous in his severity. If he felt sympathy for the child, he disguised it well and despised his own weakness. Rousseau would reverse this; he would not thwart the child. Pestalozzi adopted a method half way between these extremes; he restrained the child, but at the same time he showed sympathy and kindness. You can still see types of these forms of government. In visiting some classrooms you feel that the class is controlled by fear: this

is the spirit of the disciplinarians. In another room the class is scarcely controlled at all: this is Rousseau's naturalism, probably unintentional. You enter another room where there is no display of authority; relations of mutual consideration and helpfulness exist between class and teacher; the mood of the class is ideal for delight in the lessons: this is Pestalozzian. In no way are we more indebted to the old master than for this school atmosphere.

PERMANENT RESULTS

The influence of Pestalozzi can be seen to-day in the efforts to make the school a factor in the elevation of society by means of education. As the state is to derive benefit from the elevation of society, it is the duty of the state to provide for the education of the masses. The modern school also has for its chief aim the development of the physical, moral, and mental life of the child. The child has become, under the influence of Pestalozzi, the important factor in education. Modern research in child study has been an outcome of his efforts. Sense training, methods in geography, arithmetic, drawing, and nature study have advanced along the lines adopted by him. In his school at Burgdorf and Yverdun we have the crude beginnings of the kindergarten and the normal school. But it is probable that the new spirit he introduced unto the school-room is the most significant of his contributions to modern education.

Pestalozzi was a pioneer, an experimenter, and as such he made many mistakes and encountered many failures. He had no system of philosophy, nor could he formulate one; his own scholarship was far from profound. He was a man of imagination, of feeling, of intuition, of action, rather than a philosopher. In the list of men who have

striven for both social and individual improvement he has won an honoured place by his noble intentions, his sympathies, his experiments in education, and the eloquence of his writings.

HERBART (1776-1841)

Another educator who has deeply influenced our educational methods is John Frederick Herbart. He was one of the visitors at Pestalozzi's Institute at Yverdun. He saw the merit in the methods of Pestalozzi, and he was also able to see their defects. There was one feature of the Pestalozzian Institute that he could not appropriate to himself. It was the spirit of the schoolroom, the delicate relationship between teacher and pupils. In all Herbart's writings we look in vain for this important characteristic of Pestalozzi's training.

SPIRIT AND TECHNIQUE

No two educators could be more different than these two men. Pestalozzi presented an unkempt, even an insignificant appearance; Herbart was the fastidious, dignified university professor. Pestalozzi was sympathetic, original, intuitive in his teachings; Herbart was cold, logical, and profound. Pestalozzi's writings are impassioned and figurative; Herbart's writings are precise and abstract, rarely illuminated by a metaphor or an illustration.

The difference between them is one of temperament. We can to-day see these same types in our schools. You hear a lesson in which the teacher maintains one position throughout the period, the class is well prepared for the instruction, the questioning is admirable, the proportion of explanation and questioning is judicious, the various steps are reached logically, the application is practical and effective, the attention has been close, the beneficial

results are evident; but there has been no emotional warmth, no magnetism. This teacher is Herbartian. You hear another lesson where the gaps may be seen in the subject-matter, and the explanations may be unduly prolonged. But the children are active, creative, enthusiastic; they like the teacher, and therefore like the work. The teacher at times does brilliant things, which were not planned, but are spontaneous, intuitional. The first thing that strikes the visitor on entering the room is that the class is in the right spirit. This teacher is Pestalozzian. You ask which teacher is preferable. Both are good. The Herbartian method is best for some subjects, the Pestalozzian for others. The work is excellent when you find Pestalozzian spirit and Herbartian technique.

Herbart was a student at the Oldenburg Gymnasium, and afterwards at the University of Jena, where he studied philosophy. For three years he was a private tutor in Switzerland. This experience was important, as from his study of the three boys whom he taught he formulated much of his educational doctrine. For six years he gave instruction on philosophy and education in the University of Göttingen, and from 1809 till 1833 he was professor of philosophy in the University of Königsberg. He then accepted the chair of philosophy at Göttingen, where he remained till his death. While at Königsberg he conducted a pedagogical seminary, and gave lectures in pedagogy and practical teaching in affiliated schools, under conditions very similar to those in the faculties of education of our own universities.

Herbart was early impressed with many excellent ideas in the work of Pestalozzi. Pestalozzi had little ability in classification and organization, and no wide philosophical outlook; he could not "psychologize education," or formulate a system of education in harmony

with the laws of mental development, as he had wished. Herbart showed how education can be made the basis for the moral life, and he elaborated and defined a new psychology. He also worked out a general method for the teacher, and showed how the sense perceptions of Pestalozzi could be developed into clear ideas through apperception.

Pestalozzi's writings are valuable, but not so valuable as his experiments in his schools. Herbart's work in his pedagogical seminary was important, but not so important as his psychological and pedagogical books. His *A B C of Sense Perception*, which explains Pestalozzi's views, his *Text-book of Psychology*, 1816, and his *Outlines of Educational Doctrine*, 1835, are the works with which we are chiefly concerned.

HERBART'S AIMS AND DOCTRINES

Herbart's aim was to show how moral character could be developed by instruction. In this he was both ethical and sociological in his tendency. Good citizenship would be promoted by training the will to function aright in society. If the moral life of the nation is to be improved by education, and crime diminished, it is surely the duty of the state to insist on the education of all children.

In order that the will may be trained to function properly, the instruction must not be haphazard, but logical. Herbart tried to formulate an exact psychology in order to fill up the gaps in our pedagogical knowledge, and to correct the unscientific theories that in his day passed for psychology. The old "faculty" psychology, with its outgrowth of phrenology, had divided the brain into various compartments where the so-called faculties—memory, reason, will, etc., were supposed to reside. This theory has been replaced by the Herbartian theory that the mind

is a unity, and possesses but one power, namely, the power to enter into relationship with its environment, through the medium of the nervous system. Thought is one continuous stream of consciousness, consisting of such elements as memory, imagination, and reason, now one, now the other predominating. These can be developed and strengthened, not by treating them as separate, but as correlated and interdependent functions of the mind acting as a unity.

Herbart drew attention to one great inherent power that the mind possesses. This is the power of apperception. It is the power of assimilating new ideas by means of ideas already acquired.

Another important feature of his psychology was his conception of the nature of the will. With the old psychologists, the will was an independent faculty of the mind that determined our actions. With Herbart, the will was dependent on the ideas possessed by the mind. The will was the product of ideas, of action, of experience, rather than the cause of these. Upon the kind of ideas and experience that the individual possesses, his character depends.

The effect of the new psychology on education is seen in the following particulars:

Since the mind is a unity, not a collection of separate faculties, the subject-matter of instruction must also be unified. In the old education studies were intended to develop and train chiefly the memory and the reason. Herbart and his followers prepared a scheme by which the subject-matter of the school curriculum could be concentrated and unified upon one central core study. This core study was to be literature, especially the Homeric poems. This specific scheme of the Herbartians has proved to be as impracticable as the encyclopædic plan of

Comenius. We no longer try to find a core subject, but we still strive for a co-ordination of those studies that are interrelated. But there are other things to consider besides co-ordination; we must not forget also the many-sidedness of the mind, and its diverse interests. We must provide studies that will enlarge these interests and that will deepen and enrich man's many-sided nature, so that while he may indeed devote himself to but one field of endeavour, his interests and his sympathies shall embrace the ideals, efforts, and activities of all humanity. Only in this way can the individual be truly moral, and avoid that one-sidedness which is the root of arrogance and petty conceit, and which prevents men from sharing fully in the life of the race.

APPERCEPTION

The principle of apperception has been the great basal principal of Herbart's method, and has had a lasting effect upon the methods employed in modern schools. The stress laid upon this principle is seen in the care taken in the presentation of a subject to relate the new knowledge to the old. The teacher takes into account the pupil's experience and previous knowledge and, by a brief preparation, disposes the child to take interest in the new knowledge by making a suitable connection. The new knowledge modifies and is modified by the old. It is not a disjointed piece of information; it stands welded with the former content of the mind. In this the teacher has two grave responsibilities: he must first select the proper presentations for the mind, for out of such stuff, according to Herbart, is the will formed, and he must then see that these presentations are assimilated by the older knowledge as a preparation for still higher mental processes.

MORALITY

Herbart's theory of the efficacy of education in securing morality may be briefly stated as follows: Since the will is the product of the ideas and the experiences of the pupil, his conduct is based on the content of his mind. Presentations in the form of noble and useful ideas will preoccupy his mind and thus control his will. But knowledge alone is not virtue. The knowledge presented by the teacher is given warmth and sanction by the approval of society, by literature, and by the child's own experiences. His spirit is thus kindled to zeal for righteousness. This emotional warmth is not less necessary to the formation of good will, that is to say character or the disposition towards righteousness, than the ideas themselves. The ideas implanted in his mind give him the power to criticise every act, the emotional warmth leads him to prefer the good and to exclude the evil. In choosing the good and rejecting the bad, the moral character is formed. In the contemplation of the good instead of the bad, an inner freedom, a stalwart self is developed that becomes an abiding actuality. For a person who obtains such an inner freedom we do not fear, when he is exposed to temptation: we rely on his conduct with confidence.

Herbart's great aim in education was to induce morality. The morality that he describes is a subjective state. This morality would keep the ten commandments; but in modern society morality finds its ultimate meaning in its application to conduct as affecting others. The moral man does unto others what he would have others do unto him. He supports sanatoria and hospitals. He does more than even this. He co-operates with his neighbours in civic progress. He is a brother, not only to those in misfortune, but a partner and co-worker with those in prosperity.

GOVERNMENT; INSTRUCTION; TRAINING

Herbart carefully distinguishes *government*, *instruction*, and *training*. Government is nothing more than the good discipline of the school-room. It is not in itself the end of education; it is only the foundation on which instruction and training rest. Some teachers make good order their chief aim, no doubt because the community often judges the work of the school to a great degree solely by this standard, as it can be most readily discerned by the people of the neighbourhood. While government may not be the end, it is a very necessary foundation, as instruction and training are impossible without it. The best way to secure good government is to keep the pupils busily employed.

Instruction comes when the pupils are usefully employed in the acquisition of new ideas. The instruction must interest them, but to be of lasting benefit there should be more than mere interest in the facts presented; it should be an interest that looks at the subject from many standpoints, that is not satisfied, that asks questions, that investigates. It is then that the subject is properly apperceived. This many-sided interest enables the student to associate and harmonize the new presentations with the ideas already possessed. In this way the content of the mind is modified by the new knowledge.

As government is only a means to an end, so instruction is likewise not the ultimate aim. The ultimate good is indeed the training which looks forward to the pupil's future, which strives to give the pupil power and strength of character, to help him overcome his own faults and weaknesses. Instruction has supplied him with suitable ideas properly apperceived. The studies of the school re-

veal to him by degrees the ethical world, so that his feeble and inexperienced will is reinforced by the experience of mankind, as revealed in history, literature, and society. He will not be led by the allurements of low desires, the enticement of base companions, or the hypnotic influence of turbulent mobs to leave the chosen path of steadfast virtue, approved alike by reason and inclination. He then has an anchor to hold by.

GENERAL METHOD

Herbart is perhaps best known for his formulation of a general method of instruction. The teachers of Germany follow this method in a very systematic manner, and the teaching in the schools of America has been materially influenced by it. Of course the original general method of Herbart has been modified and adapted to the conditions on this continent. He based his method on four formal steps; Clearness, Association, System, and Method. These have been amplified to five by McMurry, and have been adapted to our modern schools. Clearness, the first step, is now divided into Preparation and Presentation. Association is now called Comparison. Instead of System McMurry uses the terms Classification and Generalization. The term Method corresponds to what we understand as the Unification and Application of the lesson. This plan of general method outlined by Herbart may become too mechanical. It may destroy initiative and inspiration if followed too slavishly. But it is a standard that should be in every teacher's mind; and when the lesson has not followed these lines of fixed method, the teacher should carefully consider whether the departure has been helpful or injurious in its results.

HERBART'S INFLUENCE

When we ask ourselves what we really owe to Herbart, we must recognize first of all our indebtedness for the formal steps of lesson procedure. In the next place we owe to him the discovery of the mental power of apperception, and of its pedagogical value. He showed us how the power of apperception could be made to function in the most effective manner. Closely associated with apperception are his theories of correlation and of many-sided interest. His Seminar at Königsberg was a model for our faculties of education and normal and model schools, and his works form a basis for much of the theoretical training of teachers. No man has promoted the development of the plan of education more effectively than he. No one has done more to make the work of teaching a profession.

Herbart's work, however, has its limitations. His psychology has been largely superseded through research and experiment. His method of inculcating morality is for the intellectual few. It was indeed almost as Utopian as the general notions of virtue held by Socrates and Plato. Yet there is undoubted good in his suggestions that the mind should be filled with noble thoughts, that these should be approved by the sympathies, and this approval strengthened by examples from history and literature. As we have said, the exactitude of his general method may degenerate into formalism. The good teacher follows these steps instinctively rather than consciously. They form a test to be applied after the lesson is taught, rather than a narrow and difficult path which he must follow. But the most necessary criticism on Herbart's psychology and methods is that they lack emotional life. The emotions seem to be underestimated by this writer. His method is too cold, too intellectual for the teaching of young children.

Another contrast that can be made between Herbart and the other members of the Psychological group is that he unduly emphasized the teacher and his technique in the school-room. The pupils were the raw material on which this highly organized instrument was to operate. Pestalozzi and Froebel made the child the important person in the school-room. The teacher is the same highly trained person as Herbart would have, but he knows how to remain in the background, while he guides the child in the development of its own powers and personality through its own interests and activities.

FREDERICK WILHELM FROEBEL (1782-1852)

Froebel was born in 1782 in a little village in the Thuringian Forest in Germany. His father, the Lutheran minister of the village, was a stern man, who could not understand the dreamy nature of Frederick, his youngest son. The financial means of the family had barely sufficed to educate his brothers; Frederick's education was, therefore, neglected. His stepmother made his life uncomfortable, so a maternal uncle took him into his home and sent him to school.

At school, owing in part to the arbitrary methods employed, he made but little progress. He could see little connection between the subjects taught, and no application of these lessons to the life around him. He accordingly left school and was apprenticed to a forester to learn forestry, land surveying, and valuation of property. Here again he met with disappointment, the forester was indifferent to his progress, and the instruction was desultory and unscientific. During his leisure he amused himself with botany and mathematics, and he developed a love of nature that profoundly influenced his philosophical outlook and his educational methods. After a time

he attended for a brief period the University of Jena, where he strove to become acquainted with many subjects; but here again he found reason to complain of the lack of connection among the various subjects as presented.

He then determined to study architecture, but was finally persuaded by Dr. Gruener, Principal of the Frankfort Model School, to become a teacher. He soon felt that this was his true vocation, and the remainder of his life was spent in the cause of education. It is a very hopeful sign that his work soon made him aware of two great deficiencies; his scholarship was not sound enough and his methods were not satisfactory. Even at this early stage of his career as a teacher, he recognized the principle that instruction must be adapted to the stage of development of the pupil's mind.

Hearing of Pestalozzi's Institute at Yverdun, he set off on foot to visit this famous school. He was greatly impressed with Pestalozzi's enthusiasm and his influence over his pupils. He felt, however, that there was something lacking in the methods, that the studies were not closely related, and that the venerable teacher himself was at times in a fog about his methods and aims.

Froebel was then asked by a lady, Frau von Holzhausen, to take charge of the education of her three young sons who had suffered from bad scholastic management. He had been reading Rousseau's *Émile*, so he went with these boys into isolation in the country. Here he soon realized the weakness of Rousseau's theory. He felt that the education would be very narrow, and the boys would be unfitted for participation in social life. He next went with these pupils to Yverdun, where he taught them, not in connection with the Institute, but in such proximity that its influence was felt in all his work. By watching

the children he learned the value of play and of walks in the country.

To improve his scholastic attainments he went, in 1810, to the University of Göttingen, and in 1812 to the University of Berlin. He devoted his energies to the study of mineralogy, in which subject he became proficient. During Froebel's stay at the Universities, Napoleon had suffered his great reverses in his Russian campaign. Prussia now arose to throw off the fetters of the French Emperor; Froebel responded to the call to arms. During the ensuing campaign, Froebel formed a friendship with two companions-in-arms, Middendorf and Langethal, who were imbued by him with a desire to help in revolutionizing educational ideals and methods. They afterwards became his assistants and colleagues in the different schools that he established. They were skilful teachers, and could express with lucidity the ideas that Froebel so obscurely expressed.

FROEBEL'S FIRST SCHOOL

On his return from the war he refused some lucrative positions in research work in mineralogy; he felt that it was his mission to remain a teacher. In 1816 he opened a school in the little village of Greisheim with five small pupils, the sons of his two brothers. He gave this modest school the pretentious title of the Universal German Educational Institute; a title which indicates the high aims he had for his educational scheme. During the next two years Froebel encountered much opposition and many reverses. The government at Berlin became suspicious that his school was teaching revolutionary ideas; so it was, but these revolutionary ideas were concerned only with education. The authorities forgot that Froebel, although not a Prussian, had volunteered to take up arms for the

deliverance of Prussia. He met opposition from the church, which feared he was teaching atheism; yet there is no modern educator whose aim is more distinctly religious than Froebel's, none whose writings show a more pious spirit. An inspector who had been sent to his school by a hostile government reported that the children lived as one happy family, that all their slumbering powers were awakened, that the order, punctuality, and cleanliness were admirable. He found no parrot-like repetition, but that each child answered with understanding. Self-activity, he asserted, was the first law of the institution. He was also astonished at their accurate knowledge of language and sciences. But the most remarkable feature of the school was the fact that knowledge was not regarded as an end in itself but only as a means of awakening the mind, strengthening the individual, and guiding him to reach his higher destiny. Truly this was a wonderful school in that day, and here was a very open-minded inspector.

THE BLANKENBURG SCHOOL, 1837

But great as his success was with children of whatever age, Froebel felt that his chief mission was to establish schools for young children between the ages of three and seven. Pestalozzi's plan for the education of mothers as teachers was impracticable, as mothers seldom have the time, the knowledge, or the inclination for this important work. He recognized the superiority of women as teachers of young children, and he devoted himself to their instruction and inspiration. This general recognition of their worth, coupled with economic conditions, has given women the preponderating influence they possess in our schools to-day. He established his first kindergarten at Blankenburg in 1837. This school

for children under seven years of age was not called a kindergarten till 1840, when Froebel found a suitably distinctive name. For the remaining twelve years of his life he devoted himself entirely to the promotion of the kindergarten system, which will forever make his name illustrious.

HIS EDUCATIONAL DOCTRINES

Froebel published a number of educational works, but his *Education of Man*, 1826, is the most important. We shall consider in the following paragraphs some of the chief characteristics of his educational doctrine.

UNITY

The word "unity" is constantly met in Froebel's writings. He complains of lack of unity in school studies, and of the want of connection between these studies and the affairs of life. He found great diversity in the objects of nature when he examined them in his studies in botany, in zoology, and in mineralogy, but he found also certain laws that prevailed through all their diversity. He felt also the relationship between man and nature in the sympathy and interest that man feels for nature. Both man and nature are creations of God, both are manifestations of the great Divine Mind. In this way he shows the union that exists between God and man and nature. These permanent laws that are found in science are the laws of God, whose spirit is manifest in all His works. The aim of Froebel's education is thus seen to be religious; he would train the child to perceive in nature the spirit of the Deity "whose dwelling is the light of setting suns, and the round ocean, and the living air, and the blue sky, and in the mind of Man."

The desire for unity is carried out in other matters. Darwin's theory of Evolution appealed very strongly to Froebel, who saw that this new principle of science agreed very closely with his cherished belief in the unity in all things. He saw this unity in the various stages of the life of the individual, in the development from infancy to childhood, to adolescence, to manhood. He agreed with Herbart as to the necessity for closer connection between the subjects of study, although he adopted no particular scheme for correlation. He agreed with the new psychology which recognized the mind as a unity and not as a bundle of faculties. He laid especial emphasis on the activities of knowing, feeling, and willing.

By a principle of evolution, the development of an organism from a lower to a higher stage must come through exercise and activity. The organs that we neglect become atrophied and useless; the organs or limbs that are exercised become strong and capable of surprising accomplishment. The exercise should be given at the right time in the development of the organism and continued according to its strength. Every exercise that will restrict or encroach on this development must be considered as injurious.

SELF-ACTIVITY

Froebel stressed the importance of activity in the development of the child. But there are two forms of activity, differing widely in their causes and their results; activity occasioned from without, and activity occasioned from within—self-activity. To the former class belong activities due to the coercion of the task-master and the activities aroused by sensational devices; these cease when the stimuli are withdrawn. To the later class belong those activities which arise out of and are sus-

tained by the child's own natural powers directed by the many-sided interest of which Herbart speaks. All these powers must be awakened, and all must work in harmony. The mind works through its activities of knowing, feeling, and willing. In the old education the one activity of *knowing* was given undue prominence. The child should also feel a *zest* in its activity, and a *will* to convert into act the thought that has come into its mind. There may be self-activity in the mere acquisition and assimilation of knowledge. It is, however, a higher self-activity when the child takes pleasure in modifying the forms of material objects around him, and in arranging them in combinations. This *doing* will call forth more of the powers of the mind, and demand also the co-operation of his physical powers. But this is more than mere doing. It is building, creating; and this means giving expression to ideas and fancies which arise from the child's own mind. The activity passes from the imitation of models to the concrete representations of conceptions ingenious and original. This is what Froebel calls "making the inner outer." Creativeness is the core of Froebel's system of education, and this arises from self-activity. This self-activity also gives completeness to the child's development.

MANUAL TRAINING

Froebel would make the hand an agency in the development of the mind. We see the influence of Froebel in the manual training of our own schools. We have seen attempts to make this work one of observation and imitation, with emphasis upon accuracy; this was somewhat after the manner of Pestalozzi. In later years this manual training has become a means not an end in education. Manual training is valuable not merely for the

learning of a trade or for the training of the hand. It has a further purpose than to give sense of form, æsthetic feeling, and practical dexterity; it is intended to stimulate creativeness, so that the child will endeavour to represent in concrete form the thought that is in its mind. Manual training thus furnishes excellent material for the child's self-activities, and aids in fostering its creative spirit and in securing its full development.

PLAY

It would be an interesting study for the teacher to note the attitude of different people and schools of education to the subject of play. With Froebel play took on an entirely new significance. In studying children, he saw that this restless activity which manifests itself in them should not be repressed, but should be encouraged. Children should not be left to themselves, but the plays and games should be organized and controlled by a competent director, whose duty it should be to see that each game contributed something to the development of the child. The child itself should not suspect that the game had any educational purpose, but should suppose that it was conducted merely for amusement. In play, the child gains health, grace, and bodily vigour, and learns the use of its limbs. From play, too, the child learns the qualities of material objects, their motions, their effects on other objects and upon himself. From play the child learns, under the care of the director, the rights of other children with whom he is associated in his games. From team-play like baseball and football, the child also learns the value of combined action, and is thus prepared for co-operation in the social life of later years. His varied experience with natural objects and his new relationships

with companions furnish him with new ideas which he translates into words, and thus widens his powers of expression. After some time he begins to construct and to represent in outward form what was before merely an image in his mind. This activity soon becomes a work that gives a delight to the child, not for its own selfish amusement, but for the pleasure and service of others. In this way the child is linked to humanity, and his heart is prepared thereby to love and serve his Creator.

SONGS

In 1843, after three years' experience in his kindergarten at Blankenburg, Froebel published his *Mütter und Kose Lieder* (Songs for Mother and the Nursery). These songs were for the instruction of young children between the ages of two and seven years. The work is composed of songs, pictures, and games. Froebel was not very skilful in song-writing, and the pictures are sometimes crude. This may not be a serious fault, as children are not sensitive to the higher forms of art. These songs may not always be suitable for children in Canada, as they were chosen for German children living in the country over seventy years ago. The occupations of the people and the character of the songs are different from those with which our children are familiar. Froebel desired to inculcate a personal observation of real life, and with this end in view the songs for our children should strive to represent actual life and actual nature. The kindergarten books should have a higher purpose than merely to please little children. Even fairy and folk stories, however suitable for places other than the kindergarten, fail to give the benefit that comes from songs that deal with realities.

Froebel tried also to select songs and games that would develop the child by the exercise of its limbs, its senses,

and its mental powers. The senses should be exercised as organs of the mind, and the activities of the child should be as far as possible expressions of his mind. Whatever attracts and touches the child awakens the activity of the limbs and the senses. In this respect Froebel's songs and games were very successful. While the child's mind is directed chiefly to things in their physical aspect, he must also feel the spiritual side. He must learn the presence of all-pervading law; he must see order and connectedness in all things. In playing the part of *The Miller* he will see the growing grain, the ripened wheat, and the purpose—to feed mankind. He will also perceive that mysterious force that makes the grain spring from the damp earth.

The heart of the child develops along with his mind, through his relations, first with his own family, and afterwards with mankind. A morality will thus be developed from the very first, through the awakening of ideas that will offset sensual desires and appetites. The æsthetic side is also cultivated by the perception of forms and colours, by practising music, and by the creation of things of beauty. While Froebel would discard at this age the dogmatic teaching of Christianity, he would give the child pictures of Christ's life. He has songs and games suitable for Christmas, and he would have the child taught ethical lessons by means of parables.

In selecting songs and games and pictures, we must see that the pictures, while beautiful in colour, form, and expression, carry some symbolism that will deepen the child's impressions. The words of the songs should convey concrete pictures, and should be readily adaptable to dramatic representation. The action accompanying the songs should give suitable exercise for the body, limbs, and voice. The idea should stimulate to *right action that*

can be done at once, and not deferred to some remote time. The music should be simple and within the range of the child's musical powers; it should also be suitable to the feeling of the song.

NATURE STUDY

Nature study was a favourite subject with Froebel. We have seen how he, as a boy, was deeply influenced by nature. He was not, however, deeply impressed with the value of a mere knowledge of the facts of nature. Nature study had for him far higher aims. From the study of nature the child gets spiritual insight and moral improvement. The child too, takes such spontaneous interest in nature that his activities are readily called forth by the objects around him. Nature study is also a subject that can be correlated readily with the other subjects on the curriculum. The method in nature study is not that of dissection and classification—"we murder to dissect." We must see each object performing its functions. The plant is growing, developing; the animal is acting. It is living nature that is studied.

PERSONALITY

Froebel would protect the individuality of the child. He would no more repress the free expression of a child's personality than would Rousseau. The child is free to follow his bent in his play, in his manual training, in every form of creative activity. He learns that he is a distinct entity, yet he recognizes his relation to his playmates, to society, to his Creator. Froebel recognized that the only complete growth comes from a free development, yet this free development is not the unrestrained license of Rousseau. The child is directed in right courses. In

his play and in his studies proper suggestions are placed before him by the teacher. The teacher knows what the child enjoys and directs his activities through the agency of his emotions and his will. The child is none the less a free personality; it is his own volition he has followed. The teacher has only seen that these activities have not taken a wasteful or injurious path.

THE KINDERGARTEN

When Froebel's name is mentioned, the majority of people associate it with the kindergarten and little else, although his educational ideas were applicable as well to older stages of the child's life. Development is the aim of the kindergarten, as it is the aim in all stages of education. Yet people are quite right when they think of the kindergarten; it is the masterpiece of Froebel's work. The teacher watches the child's natural interests and tendencies and provides work that calls forth the self-activities of the child along these lines. The object is not the acquisition of knowledge, as in the grades of the public school. Knowledge is merely incidental to the expression of the child's own nature through the medium of gesture, form, and language.

The *gifts* and *occupations* form another feature of the kindergarten. Froebel meant by the *gifts* the material supplied to the children. This consisted of cubes, cylinders, prisms, balls, etc. The *occupations* were the activities called forth by these gifts.

The critics of the kindergarten often attack this department of the school work because it is so difficult to show practical results. Knowledge, as has been said, is subsidiary to development, but knowledge can be more readily tested than development. The kindergarten

teacher strives to bring the child into proper relationships with his playmates, to make him understand his social relations and, in some degree, his physical environment. Following his acquaintance with physical things, he begins to construct and create representations of the thought that lies within him.

Critics of kindergarten methods have received with much favour the methods employed in Dr. Montessori's schools in Rome. The Montessori Method claims to discipline through freedom. It teaches reading, writing, and arithmetic to children under six. It develops the senses to a great degree of acuteness. The children learn to do many practical and useful things, such as buttoning their clothes, sewing, setting tables for luncheon. They learn many facts directly that under other methods are conveyed in a roundabout way. It is doubtful, however, if there is as much group-activity as in the children's games and employments of the kindergarten. To substitute for the stories of the kindergarten, as the Montessori system does, precocity in reading, writing, and arithmetic, would be, after all, a doubtful gain.

Dr. Montessori's work will, however, prove a benefit to our schools. If our kindergartens are not practical enough, if our teachers have been following Froebel's practices in a routine fashion and have forgotten his spirit, the study of Dr. Montessori's work should remove our complacency. Froebel's theories are too well-founded in philosophy to be easily displaced, but new suggestions are always to be welcomed. We should remember how the school-men of the Middle Ages thought that Aristotle had said the last word, and how, in consequence, the blight of an arrested development fell upon their work.

SUMMARY

Let us now briefly summarize the permanent influence of Froebel. He established the kindergarten. He encouraged women teachers. He influenced all phases of elementary education, as he believed this stage of evolution the most important. He studied the child's nature, and planned a series of progressive steps adapted to the child's development. He tried to bring unity into all studies, and to bring man into closer conscious relations with nature and Deity. He made development, self-activity, creativeness, and free personality the chief ends of education. He showed how the child could realize itself by means of play, manual training, and individual work. We are still following along all these lines of education, and in many cases we have made substantial advances, but we must ever hold Froebel in the highest veneration as our inspirer and our guide.

CHAPTER XVI

THE SCIENTIFIC MOVEMENT

THE scientific movement of the nineteenth century was almost identical in spirit and in aim with the sense-realism of the seventeenth. But it was wider and more powerful; the slender stream had been swollen to a mighty torrent.

The world had not been ready for sense-realism; but new conditions had now arisen to make the scientific movement successful. The naturalistic tendency of Rousseau had convinced many people of the necessity for contact with nature. This had been followed by the object lessons of Pestalozzi. Physics and biology were now developed sciences, and afforded more systematic and extensive fields of study than they had done when advocated by Francis Bacon. The great industrial and commercial expansion of the time had made evident the inadequacy of an education based on classical languages and mathematics alone. People were demanding an education that would prepare them for the demands of modern life. The aim of the Scientists was to meet that demand.

The Disciplinarians placed a higher value upon the mental discipline gained in the process of learning than upon the knowledge acquired. The Psychologists looked upon knowledge only as a by-product; with them the unfolding of the child's capacities was the first consideration, and to this end special attention was directed to methods of instruction and the study of the child. The Scientists changed all this; they placed the greatest emphasis on the content; with them the questions were

"What do you know?" "How much do you know?" A knowledge of the phenomena of nature was considered the most useful and practical form of knowledge. The method of study was to be the inductive.

Since, as is obvious, the number of studies must, to meet the views of the Scientists, be greatly increased, it would be impossible for any one to get a grasp of all these subjects. This difficulty was met by allowing freedom of choice in studies. The Greek and the Latin literatures were no longer to hold their predominant place as the chief subjects of a liberal education. The literatures of the modern languages were held to rival the literatures of the classical languages. The arts and the sciences were now so advanced and organized that the student in these branches of learning could get as much training from them as from the old studies of classics and mathematics. A proof of the success of this movement is seen in the fact that our secondary schools and our universities have adopted this view of the Scientists by recognizing equivalence of values among studies, and by granting optional courses.

Without entering into any discussion as to the comparative educational values of the older and the newer studies, it is quite clear that in view of the extensions in the field of knowledge, of the development of modern literature, and of the demands of modern life, the old conception of what comprised a liberal education needs revision. The old view of a *liberal education* suggested studies that aimed at mental development, but that were very remote from the practical affairs of life. The newer view includes all that was formerly understood by the term, but it also takes into account the need of preparation for the practical duties of life. To the questions: "What do you know?" "How much do you know?" we

now add a third: "How does this knowledge promote your efficiency and happiness as a member of society?"

The naturalistic and the psychological movements had been originated and formulated on the continent of Europe. In England was written the best literature in scientific education, although Germany and America may have felt the influence of this movement more than England. The general indifference to education and to the question of the value of subjects of study has been changed in our day to vital interest.

HERBERT SPENCER (1820-1903)

Spencer is the great representative of the scientific school. In his educational writings his style is clear, pungent, and convincing. He wrote four essays which he afterwards combined. The first raised the question, "What knowledge is of most worth?" The other three dealt respectively with intellectual education, moral education, and physical education.

WHAT KNOWLEDGE IS OF MOST WORTH?

To the question proposed in this essay Spencer answers: The knowledge that tells us how to live. It is the knowledge which directs the right rule of conduct in all directions and under all circumstances. He finds the most valuable kinds of knowledge to rank in the following order: 1, Knowledge of self-preservation; 2, Knowledge to be used in gaining a livelihood; 3, Knowledge necessary for the rearing of children; 4, Knowledge that helps us to perform the functions of a citizen; 5, Knowledge for our leisure hours. We shall consider each of these separately.

SELF-PRESERVATION

Knowledge of self-preservation. Spencer shows that we are not capable of living in the fullest sense if we are

not in a healthy condition. He shows how disease shortens life and interferes with our work. He concludes that hygiene and physiology are the most necessary subjects on our curriculum. What Spencer says about the necessity for a knowledge of hygiene and physiology is true. If people would give more attention to hygienic laws, the capacity for work and the enjoyment of life would be greatly increased.

But hygiene and physiology should not occupy the greatest amount of attention; there is more in life than merely keeping alive and healthy. It is possible even to be over solicitous in regard to conditions of health; oversolicitude may result in hypochondria; many of our organs perform their functions more effectively when we allow them to do their work undisturbed.

GAINING A LIVELIHOOD

The next in order of importance is the knowledge that aids us in getting a livelihood. This knowledge is an indirect means of preservation of life. Spencer shows how geometry, physics, chemistry, and biology lie at the foundation of all the practical arts and business of life. The majority of people are engaged in the production, preparation, and distribution of commodities for food, shelter, and clothing. It is evident that a knowledge of scientific principles is the basis of success in these various occupations.

It is true that we should know the science that underlies our own occupation, but a mere smattering of many sciences may be a dangerous thing and lead us into mistakes. It is better to trust to experts in their special fields of knowledge—the electrician, the engineer—rather than to rely on our own knowledge. This is still more true in the preservation of life; it is better to trust to one's medical adviser than to attempt to heal one's self.

The modern art and commercial schools are a recognition of the principles advocated by Spencer. Our national and social life will be improved by the union of science and mechanical skill among our artisans. The social life of the individual will be improved by increased intelligence, and by the pecuniary rewards for more valuable services. When a student has learned well the applications of a science in connection with some occupation, he knows how to appreciate the value of scientific explanations. Spencer's claims for the study of science are just, but it is doubtful if the student in the elementary schools should begin to specialize so early in life. While this knowledge is highly important, we must remember that knowledge must be given according to the interest and capacities of the child. We must not prematurely introduce him to scientific and utilitarian aims.

REARING OF CHILDREN

The knowledge that comes third in importance is that which concerns the rearing of children. Spencer shows how much care and intelligence is exercised in the rearing and feeding of domestic animals, and how little is given to the food and training of children. He draws attention to the prevailing ignorance concerning children's emotional life. He shows the unsuitability of dress, of diet, of studies, and of the order of studies. All these criticisms of the treatment of children by parents and nurses may be true, but are our elementary schools and our secondary schools the proper places for studying these matters?

CITIZENSHIP

The knowledge that comes fourth on his list is that which fits a man for citizenship. Spencer shows that history is already on the programme of studies for this pur-

pose, but very cogently points out that the information we gain about wars and courts and kings does not help us very much in voting intelligently. He shows that students should understudy the history of society, its modes of government, its ecclesiastical institutions, social customs, superstitions, industrial systems, guilds, distribution of commodities, money, industrial arts, æsthetic culture and art, food, homes, and amusements. If he had added biography, we would agree with all that he has said.

Spencer points out that to teach history in this sense will require the services of specially skilled teachers, that it is much more difficult to teach than a series of mere chronological events. It requires adaptation of the knowledge of the past to present-day conditions; it requires the teacher to obtain the best part of his lesson from other sources than the text-book. History would then have an interest and a vitality that is now often wanting. He further asserts that the student should know biology and psychology as sciences to read history aright. In this we cannot agree with him for, while it may be admitted that the student, through a knowledge of these sciences, will appreciate better the laws of life, as exemplified in history, yet the young student who has no knowledge of these subjects may get much that is valuable from history, inasmuch as many of its lessons have come within his everyday experience.

LEISURE

In the last place, as knowledge for our leisure hours, Spencer would place art, literature, and enjoyment of nature. These subjects are not as vital as the others; they are not essential to human happiness. They should, therefore, be taken up in the leisure hours of the day, and in the leisure years of life. Still Spencer would not have

us slight these subjects, as life would lose half its charm without them.

Spencer has been bitterly attacked for placing all these culture subjects in this last position. It is certainly more prudent for man to equip himself with a knowledge of those subjects that will preserve his life and aid him in earning his living than merely to be skilled in music and literature if this implies inability to earn a livelihood. As we advance in life, he says, we may acquire a mastery over the useful subjects that will allow us more time for relaxation and cultural delights. In this Spencer may confuse order of time with order of importance. These studies, which according to him should be relegated to the later years, may be more important than the others. They are, at any rate, peculiar to man, and give him a superiority over the other members of the animal creation which share with him such duties as providing food and shelter for themselves and their offspring. And besides, the leisure activities of the last class of studies have an important bearing on all other forms of human activity. Our homes, our eating, and our drinking, our relations with our fellows, are profoundly influenced by the graces derived from these leisure studies.

PLACE OF SCIENCE IN EDUCATION

Spencer would have us believe that science is necessary even for a mastery of music and the liberal arts; mathematics for music, and anatomy for sculpture and painting. He would thus make science basal where it is, in truth, merely auxiliary. It would perhaps be quite as much to the point also to demand of the sculptor and painter a knowledge of tailoring and dress-making. The artist endeavours to represent the human form as it is

seen by the eye of humanity at large, not as it is measured in the dissecting room or the morgue.

Spencer maintains that it is contrary to nature to have one set of studies for information and another for training. Could the subtle senses of the Indian be trained as well by exercises in sense perception as by the actual tracking of his prey?

He argues that science is the best subject also for the cultivation of judgment. The student of science is trained to draw conclusions from data and to verify these conclusions by observations and experiment.

He further asserts that the study of science cultivates the powers of observation far better than that of other subjects. It is true that the Indian will detect the traces of his enemy or the game he is hunting better than the white man. But would his sense of hearing, or sight, or smell be more acute than that of civilized man, if he were placed amid the complex conditions of modern cities? Is the student of science more remarkable than other men for the correctness of his judgments on business or politics? Does a training in the observation of plants and of birds cultivate the power of observing accurately, for example, a piece of complicated machinery? This general power of sense perception, or of judgment. or of observation is very doubtful. We can gain a special power in these lines in so far as we confine our efforts to similar work, but this special power avails us little when diverted to other matters.

INTELLECTUAL EDUCATION

Spencer shows how absolutism and authority in church and state were paralleled by uniformity and authority in educational methods: "There cannot fail to be a relationship between the successive systems of

education and the successive social states with which they have co-existed." "Out of the apparent chaos of aims and methods and subjects on our curriculums will come at last a rational system: By segregation of truth and destruction of error there must come a correct and complete body of doctrine." "Human opinion passes first through the unanimity of the ignorant, then the disagreement of the inquiring, and lastly ends in the unanimity of the wise. In the main, we are yet in the second stage," though there are evidences, he adds, of our having entered upon the third.

In the chapter from which the above quotations were taken, Spencer has selected the best of the educational principles of the sense-realists and the psychologists, as will be seen from the discussion following. He warns us against trying to make juvenile prodigies of learning: "We must learn how to lose time wisely." Precocity is to be discouraged, as precocious children usually fail in life.

He condemns learning by rote rather than by understanding. With it should be abandoned teaching by rule, which gives the appearance of knowledge without the reality. It is not many years since the Ontario teacher gave rules for finding square root, for obtaining the area of a circle, and various triangles without any explanation of the principles on which the rules were based. When the pupil who has learned rules without understanding the reason is met with a new condition in the problems set, he is at sea; but if he has been instructed in the principles, he solves the new case as readily as he did the old one.

Spencer, in common with the realists, insisted that the concrete should precede the abstract. A glance at the present practice in our schools will show how completely this idea has been adopted. Look at the sense-material now used in teaching arithmetic; relationships are now

taught by experiment. The same is true of geography and of geometry, whose truths children are now learning from objects, as the race learned them in the first place.

Spencer agrees with the naturalists and with the psychologists that the pursuit of knowledge should be pleasurable. When the child has an inquiring mind for certain phases of knowledge, we know that his mind is developed and ripe for that information. When this knowledge fails to interest him, it is evident either that the mind is not ready, or else that the subject is badly taught. We must follow nature in our methods. The subject-matter must be suitable to the state of evolution of the child's mind. The apperceiving content of the child's mind must be adequate to the task of assimilating the new presentation. For instance, if you wish to teach that the globe, while revolving around the sun, also rotates on its axis, consider how many previous concepts the pupil must be in possession of before he can get this idea. The teacher's explanation of the matter is often obscure to the pupil, because some necessary precedent concepts have been overlooked.

Spencer shows the value of a course of studies for the nourishment and development of the child's mind. The higher and more complex the animal organism, the longer is the young under the protection of its parents. The child cannot secure his own food till he is about fifteen years of age. He is equally as helpless to get food for his mind. The lack of sufficient food for his body leaves the child stunted in stature; the lack of sufficient mental food leaves the mind in a state of arrested development. Some curriculum is necessary; it is then only a question of laying down the most suitable.

Spencer greatly admired the work of Pestalozzi. He believed that Pestalozzi's general method and principles

of education were correct, but that his application of special methods and his experiments failed to carry out these principles. He believed that the failures of Pestalozzi and his successors were due not to the defects in the principles, but to defects in those who tried to apply them. A poor teacher, he says, will make a bad failure in attempting a good method, a poor teacher may succeed fairly well with a mechanical method; a teacher who does not understand psychology can hardly be expected to succeed with a psychological method.

Again, Spencer urges the old principles of Comenius that the simple should precede the complex; the concrete, the abstract; the empirical, the rational. He gives suggestions for the teaching of drawing, colour, and geometry, that have only recently been adopted in our schools. He advises constantly that the child should be aided in his self-instruction, should be told as little as possible, should discover for himself, but, above all things, he urges that the work must be pleasurable. Under these conditions, the impressions received by the child will be more permanent; he will remember better; there will be improvement in his health, temper, and moral nature; and he will continue longer at school.

MORAL EDUCATION

The characteristic feature of Spencer's moral education is his theory of discipline by consequences. There are certain unavoidable consequences of bodily pain that follow certain actions. Physical actions are right or wrong according to the beneficial or injurious results that are produced. Parents and teachers should see that children suffer the true consequences of their conduct. When they make a litter on the floor they should be made to clean it up; when a child is late for a walk it should be left behind. When, on the other hand, a father whips a

boy for breaking his sister's toy and buys her a new toy, he imposes an artificial punishment on the boy and the natural punishment on himself. The value of this discipline of consequences is that it is exactly what happens in real life. In the case of serious faults like theft, the natural consequences are the displeasure of friends and the restitution of the property. It is necessary to show displeasure with the culprit when serious faults are committed. Parents and teachers should be sparing in giving commands, and they should see that the tone of voice is not irritating or tyrannical. The command, however, should be firm and consistent, and there should be insistence upon obedience.

Two criticisms are often heard of Spencer's discipline of natural consequences. The first one is that the natural punishments are often too severe and, sometimes, may be quite out of proportion to the offence. Spencer, however, declares that we must guard the child from severe pain. We may let him burn himself slightly but not severely.

The second criticism is that this kind of moral training is not very lofty or noble. It will beget nothing higher than mere prudence; it trains the child to serve himself but not to serve others. This criticism is just. Such training will be likely to ensure carefulness and efficiency, but it fails to hold before the child the highest ideals of conduct.

PHYSICAL EDUCATION

Spencer calls attention to the great care and intelligence that people exercise concerning suitable food for horses, cows, pigs, or dogs. These same people give little attention to the diet of human beings, especially of children. After this criticism we are surprised to hear him say that we should trust more to our natural appetites

and less to dietetics. If this be true, it is better to give more attention to the feeding of animals and less to our own diet. He shows that children must have more food than adults to restore the waste, sustain the animal heat, and further the growth of the body. He advises that foods should be varied, of good quality, and sufficient in amount. He would have animal food form a part of the diet.

He advises warm clothing, and does not encourage the idea of hardening ourselves by exposure. He strongly urges the value of physical exercise, and contrasts the bodily exertions of boys at play in their schools with the absurd restrictions on the exercises in girls' schools. Play does not prevent a boy from becoming a gentleman; neither should play prevent a girl from becoming a lady. Gymnastics are not substitutes for games; they are only supplementary. The best exercise is the natural exercise of play, which we continue so long as it is pleasurable. No one doubts the value of the education that the young men of England receive on the school grounds; English youths in the great public schools have learned to play better than the youths of any other race.

SPENCER'S ALLIES

Herbert Spencer's theories were ably supported by Huxley. These two men formed, with Darwin and Tyndall, a group of distinguished scientists who in their writings always appear as the friend of the poor man. They would remove the handicaps of fortune in favour of the rich that were a feature of the old system. They ask an even chance for everybody, a fair field and no favour. They suggest that life is a competitive struggle where the weakest must succumb. Their principles appeal to the strong and virile among men, to the democratic spirit that

equalizes man's opportunity. They take little account of self-sacrifice, of service for the sake of others, of high ideals, of culture, of art, of music, of literature—in fact of anything but material success. Their theory is very seductive. It is in harmony with the aggressive commercial spirit of the age. It is argued that the educational methods and ideals best suited to us are those which reflect the spirit and life of our times.

TENDENCIES CONTRASTED

The Psychological, Scientific, and Social tendencies were contemporary. The leaders of these different movements had aims that extended beyond the tendency with which their work is usually associated. These three tendencies may be contrasted here, so that the student can readily separate the principles of one tendency from those of the others.

The psychological tendency was individualistic. Its leaders thought of the development of the individual; they studied the activities of his mind; they planned a suitable method for his development and the appropriate studies to be used at the different stages of his development.

The social tendency cared little for the individual. From the viewpoint of its leaders, the aim of education was not only to secure the permanency of our social institutions, but to work improvement in them. While the individual is of little account, it is felt that social betterment comes when all the members of society share in the development of society.

Pestalozzi, Herbart, and Froebel were all social reformers as well as psychologists. We have seen how Pestalozzi worked at Neuhof and Stanz for the welfare of neglected children. Education would make these chil-

dren industrious, law-abiding contributors to the national wealth. These children would otherwise be hindrances to social progress, as they would grow up to be paupers, thieves, or malcontents. Pestalozzi felt that the old methods were inadequate, and in his later years he turned his attention to the formulation of methods based on psychological principles which would effect the ends he sought as a social reformer.

Herbart is also a social reformer in his aim, and is a psychologist only in so far as he seeks to further that aim. He, indeed, asserts that, "The one and whole mark of education is to be summed up in the concept—morality," and it is to be remembered that with Herbart the moral and the social are interchangeable and almost synonymous terms. What we call moral action is only the control of impulses that have come down to us from our savage forefathers. We do not extirpate these impulses, as the monastics and disciplinarians hoped to do, by asceticism or severity. We control these impulses by knowledge of right and wrong, by the influence of the school-room, the home, the church, our companions, our reading, and thinking. The will functions aright in society, and our actions become efficient, benevolent, and just. Our actions then affect the other members of society. Thus the moral aim of Herbart produces a social betterment.

Froebel also was a social reformer. The school to him was only a society in miniature. In school the child learned mutual dependence, co-operation of effort, his individual rights, the rights of others, the power to adjust himself to conditions that are very similar to the actual life of manhood. The school in its community life is an admirable preparation for life work. All schools have had this value, but Froebel's kindergarten was the

first school that intentionally prepared the pupils for life by suitable occupations.

The scientific and social movements are very similar. They both emphasize the value of the content of studies. Natural and social sciences must occupy the largest space in any curriculum. Both tendencies are opposed to the humanistic studies and to the theory of the disciplinarians that the mental discipline is more important than the thing learned. They do not pay much attention to the technique of method as formulated by the psychologists.

But the scientists and the social reformers differ in one respect. The leaders of the former school consider what knowledge will benefit the individual, how it may serve to afford him a livelihood, and make him efficient. The social reformers consider how the programme of studies and the training given by the teacher will perpetuate and improve the institutions of society. The pupil is to be prepared by his education to take his part intelligently in municipal and national affairs, and is to be brought up to respect our courts of law, churches, schools, homes, and property. The social reformers expect that the pupil will not only be able to "pull his own weight" by earning his own living, but that he will help to carry the burden of the less fortunate, and advance the welfare of his country.

Parents in general look at education from the scientists' point of view. They ask that their children may have a fair field in the competitive struggle of life. The thought of service to others usually takes a secondary place.

CHAPTER XVII

EDUCATION FOR SOCIAL EFFICIENCY

Social conditions reveal great need of education. A partially-educated people, with a taste for sensational and tawdry pleasures, is very little better than a more stupid but more contented people. The restlessness that drives people from the country to the city, and that finds no pleasure in the home, can only be cured by a deeper interest in the occupation of everyday life and by a more substantial knowledge and culture. In education lies our hope for a better distribution of all classes of workers over the varied fields of industry such as will bring our country to the front of nations in industrial progress and in intellectual development.

EDUCATION FOR SOCIAL CONTROL

Before the days of universal education the masses of the people were controlled by police and military power. The church also exercised a certain degree of control by virtue of the divine sanction of its authority. All these forces are at work to-day, but the tax-payer relies more than ever upon the schools; they are less expensive and more effective. Take the example of the United States. The schools of this great republic have done more than any other agency to assimilate the unenlightened peoples who have immigrated into that country during the past fifty years. Our teachers have the same work to perform in Canada. When these immigrants are once admitted to our country, we must treat them as fellow-Canadians. We must teach them to appreciate our liberties, to respect our institutions, to vote intelligently,

and to leave behind them the servility and violence that characterized them in their former homes. If any one doubts the advantages of education for social control, let him contrast the conditions in Mexico with the conditions in those countries where education is not only free but compulsory.

EDUCATION FOR INTELLECTUAL ELEVATION

Another purpose of the school is to disseminate knowledge. In these days, with so many educational aims expressed in books and magazines, such a commonplace aim is sometimes overlooked. And yet this is one of the chief aims the trustees have in view when they engage a teacher. The knowledge imparted in the public schools dispels much ignorance and brings "sweetness and light" to many homes. Upon the efficiency of our schools depends our intellectual status among other nations. True, we must admit the powerful agencies of the press and the pulpit, but these would avail little without the schools. At present the amount of useful knowledge possessed by the man of average mind is much below his intellectual capacity. This shows how much we can still elevate the national life, for upon knowledge depends intelligence, social progress, and happiness.

EDUCATION FOR SOCIAL PROGRESS

Francis Bacon emphasized the importance of the study of the tradition by which one generation transmits to the next the substance of the culture of past generations. The individual thus absorbs the achievements of the race in summarized form. Stability of society is secured by the same process. In securing stability of society we must not make society stationary as it is in China. The individual may modify the traditions as he

receives them, and may contribute some new element or increment to these traditions. Social progress is secured in this way.

Education does not train a pupil to a condition that will be permanent. We are living in a constantly changing environment. This changing environment should be progressive, not revolutionary; gradual, not spasmodic.

> Regard gradation, lest the soul
> Of discord race the rising wind.

Our opinions are being modified by new conditions or by new light on old conditions. Our legislators are amending our statutes every year to keep pace with modified opinions and changing conditions. Transportation, telephones, mail service are examples of the numerous agencies that are modifying our environment. Inventions and new machinery sometimes make even too rapid a change in the trades and occupations. Some individuals succumb to the pressure of changing conditions; others adjust themselves badly. The educated man adjusts himself readily to the modified environment and takes full advantage of the opportunities that the changes afford. Our schools should therefore try to make our young people ready to meet emergencies. In no way can the student develop his own individuality better than by cultivating a ready resourcefulness and a determination to produce results rather than to find excuses.

With this adaptation of the human race to its environment, there results human evolution. Our race has passed through various stages of physical and mental development, and these processes have been in some measure unconscious. Natural selection and the survival of the strong have been the chief agents for development in the lower animal life. With man, education is the

chief agent. The individual and society strive for this evolution consciously, and this should secure progress and development with greater certainty.

The knowledge of the arts and sciences, of hygiene, economics, ethics, and eugenics should lead all men to live on a higher plane and thus by conscious effort to promote an advanced stage of evolution, with greater speed. The same stage might be reached by a "motion toiling in the gloom," through the slow progress of natural evolution, but education may bring these benefits at an earlier period in the development of the race.

The chief means by which this demand for social improvement is met has been by free education for all in our public schools. Our school system is thoroughly socialistic. The people who pay the rates care little for the advantage of individual pupils; they are preoccupied mainly with the welfare of society. State-aided schools had been suggested by the earlier educators, as Plato and Luther; but their establishment did not receive wide or serious consideration till after Rousseau's eloquent claim that with education the common man could fit himself for the highest human duties and privileges. We see now that it is not charity alone that impels us to institute free schools. It is our interest in the preservation of the national institutions that mean so much to us.

The spirit which maintains our schools for defectives is more humane and altruistic. This spirit is however only another phase of the socialistic tendency. Our pupils, the citizens of the future, must be educated not only to support themselves and those immediately dependent on them, but they must perform a wider service. They must support with their wealth the hospitals, asylums, homes, and schools of their less fortunate fellows. Our libraries, our lecture courses, the press, our

evening schools are all further agencies for bringing about social betterment.

EDUCATION FOR INDUSTRIAL EFFICIENCY

The industrial phase of the socialistic tendency deserves consideration. The purpose is to make each individual a productive social unit. One of the means by which this is being done is by *manual training*. In our public and high schools our pupils get instruction in woodwork, ironwork, cooking, sewing, clay modelling, and paper folding. The object has been, as we have seen in Froebel's plan, mainly educational. But such work has its vocational aspect as well, and tends to become of economic value by rendering the individual a more productive contributor to the wealth of the nation. Closely allied to this work is the technical education given in the applied science departments of our universities. The equipment of these departments is very expensive, but the public support them willingly, because of the conviction that their graduates in engineering, etc., through their increased efficiency, will reimburse the nation for the expenditure.

Our free normal schools are signal examples of the socialistic tendency. The buildings and equipment are not maintained for the sake of the students, but in the interests of the children of our land. The people believe that the teachers who receive this free training will make full returns by their greater efficiency in conducting the public schools of the province.

Agricultural education is another phase of the socialistic tendency. Our national greatness, the stability of our nation, our food supplies, depend upon the productivity of our farms. For these reasons our agricultural colleges and experimental farms have been established,

and our public schools are being adapted to meet the demands of this new phase of education. Agriculture requires the widest knowledge, hence, courses have been instituted in chemistry, botany, zoology, entomology, horticulture, dairying, veterinary science, and animal husbandry. Mention might also be made of the education given in commercial work in our high schools and in private institutions to meet the demands of business life.

The latest feature of this great movement to provide education for social efficiency has been the establishment in Ontario of industrial and vocational schools. If Canada is to rank as an industrial nation, our mechanics must be trained and educated. They must know more than merely how to manipulate a machine. Canadians must not long continue to do the heavy and unskilled work under the direction of foreign experts.

To meet the demand for increased social efficiency we have now schools which supply courses in wood-working, pattern-making, forging, plumbing, sewing, cooking, millinery, and dressmaking. In these schools it is believed not only that more efficient workmen will be produced, but also that this active employment in the class will induce many pupils to remain much longer in school than they do at present.

The changing conditions of modern society have eliminated many occupations that at one time belonged to the household and to the neighbourhood. Occupations in which the young people formerly participated in the home are now, in many instances, transferred to the factory, with a consequent loss of the constructive skill and the habits of observation which characterize primitive communities.

THE IDEAL SCHOOL OF THE FUTURE

Have we gained nothing in return for the loss of this ingenuity and this practical power over natural forces that our fathers possessed? Have the large factory systems, departmental stores, conveniences of travel, and means of communication, brought no compensating qualities? We have greater toleration, we understand human nature better, have greater adaptability, and we show greater commercial enterprise. While we retain these advantages, can not our schools secure more of the advantages that come from contact with social and industrial life? If radical conditions have come into society, our schools must also undergo radical changes. Froebel claimed that the school should be a miniature society. Dewey believes that the pupil should be prepared for life in society by manual work in the school, where he can co-operate with his fellows, where he can learn true discipline in the relation of teacher and pupil, where he will engage in active occupations in the field of art, elementary science, and nature study, where the study of geography will call into play physical as well as mental activity in studying the earth as the home of man and as the source of his occupations and the record of his achievements. Through these achievements he realizes the historic development and evolution of the race. The ideal school of the future will exhibit this community life; it will engage in types of occupation that resemble the occupations of the larger world; and the pupils will develop in these occupations a desire for art, literature, history, and science. The ideal school will correspond to the ideal home; in such a home there is the freest interchange of statement, inquiry, and response. The child participates in household occupations and learns the rights of others; he has tools, a bench for car-

pentry, and a garden; he takes excursions into fields and woods, where he finds out many things in regard to nature and the activities of man.

In such a school the passive reception of knowledge will disappear. A new discipline will take the place of the old; it will be self-discipline and self-reliance arising out of the child's self-activity. Instead of the ordered question and answer of the present-day school, the hum of busy voices will at times be heard seeking on all sides instruction, direction, and advice, while busy hands are moulding the wood or clay, the brass or iron, into shapes forefashioned in the mind, and, even the more formal tasks of the school will upon occasion yield a place for free discussion, question, and mutual correction.

Children love to revert in their play to primitive conditions. They build huts after the manner of savages, and construct, or pretend to construct, bows and arrows. They fight many enemies and hunt imaginary wild animals. This interest in primitive life usually arouses only amusement in the parents and teachers; if utilized, it can be made very profitable. The child can be led to see the progress of the human race by slow degrees. Let him live through in his play the hunting age, the agricultural age, the iron age, the age of our grandfathers, and this modern industrial age. In this way he will have obtained a rudimentary view of the panorama of History and of the progress of science.

CHAPTER XVIII

EDUCATION IN GREAT BRITAIN AND IRELAND

ENGLAND

It took a long time for the people of England to become persuaded that the education of all the people is a function of government. When the nation has reached this stage of educational faith, political and economic reasons are found to justify the support of public schools by the state. Before it reaches this stage, schools must be supported by religious or philanthropic institutions. Such was the condition in England until the latter half of the nineteenth century.

THE MONITORIAL SYSTEM

Societies like the National Society and the British and Foreign School Society were doing what work they could but were hampered by lack of funds. These two societies were the exponents of the Monitorial System, in which the older pupils taught the younger ones under the direction of the teacher. In some cases it was thought possible under this system for one teacher to carry on the education of one thousand pupils.

This economical system attracted general attention to public education. There were fewer vacant hours in school work than had been the case in the old schools, where most of the pupils were idling when not "saying their lessons" to the teacher. The monitors kept the class busy. There were special monitors who gave attention to discipline, promotion, examinations, making pens, preparing writing paper, and teaching.

Two names are associated with the Monitorial System, those of Andrew Bell and Joseph Lancaster. Bell was an Anglican minister, who introduced the system into England. Lancaster began among the Quakers; his work had the support of Whigs and Dissenters. Lancaster had remarkable success in some schools, but he attempted too much and on different occasions his efforts ended in bankruptcy. These two men disliked each other very much, and each believed the other was trying to rob him of his laurels.

The faults of the system are the superficial and formal character of the instruction given by the pupil-teachers, and the unwillingness of parents to allow their children to teach, when they were sent to school to learn. But the system did give England many schools, and cheap schools, and it had the further beneficial result that the people, by contributing to the support of these schools as individuals, eventually saw the necessity of making education a function of the state.

In 1808 the Royal Lancasterian Institution was founded by Lancaster and some of his friends, and in 1814 its name was changed to the British and Foreign School Society. The National Society, of which Dr. Bell was the manager, was founded in 1811, to promote in school instruction the principles of the Established Church.

STATE AID TO EDUCATION

In 1833 the Government voted a grant of £20,000 in aid of elementary education in England—the money to be applied to the building of schools. This grant was distributed through these two rival Societies, and was the first state aid to education in England. The vested rights that the National and the British and Foreign

Societies acquired by their control of the Government appropriations retarded for many years progressive educational legislation in England.

In 1839 the Government made an attempt to establish a Board of Education, but there was much opposition to the government oversight of schools. In spite of the protest of the Lords, a Committee of the Privy Council was appointed to administer the government grants to elementary education. In 1856 this Commitee, through its chairman, was made directly responsible to the House of Commons for the use of the funds voted for educational purposes.

ESTABLISHMENT OF BOARD SCHOOLS

A further and very important advance was made by the Education Act of 1870, which has been called the Magna Charta of national education in England. This Act provided for the establishment of "board schools," controlled by local school boards, and for the levying of local taxes for the support of schools to supplement the Government grants and pupils' fees. The Act also gave the local boards power, under certain conditions, to enforce attendance at school.

Legislation thus far had made provision for elementary schools only; but in 1899 a National Board of Education was created, to which was transferred the functions of the Committee of the Privy Council on Education, with enlarged powers, which included some supervision of secondary education.

By the Education Act of 1902 the school boards were abolished, and the administration of the board schools was transferred to the municipal councils. The councils were also given more control of secondary education, for which also government grants were provided. The

voluntary (church) schools also received support from the public funds, and came, to some extent, under the supervision of the councils.

Since this Act of 1902 the progress made by England in education has been unsurpassed by any other country in the world. The social, political, and religious interests that had retarded the progress of education in the nineteenth century have now withdrawn their opposition. It was not, however, a revolution that brought this change; the theory of state control was gradually accepted among the people. There is still, however, a social cleavage that prevents many people from using the public elementary schools.

ADMINISTRATION OF EDUCATION

The Board of Education in England does not exercise the control that similar bodies have in Germany or in France. It merely acts in an advisory and supervisory capacity, and gives financial assistance to local effort. As long as any local authorities bear the expense of education themselves, they are comparatively free to conduct experiments in education, and to remain outside the control of the central authority. The Board of Education publishes every year a Code of Regulations for public elementary schools in England. This Code is issued with the sanction of Parliament and has the force of law. It deals with such matters as curricula, teaching staff, premises, grants, attendance, equipment, but prescribes only the minimum requirements compatible with efficiency. The Government allows the greatest liberty to local councils, encourages local effort, and, by its mild supervisory central authority, has removed the chaotic conditions that characterized the educational situation in England

during most of the nineteenth century. The result is that a well-ordered system has now arisen out of this confusion.

The administration of local education is not in the hands of school boards as in Canada. The county and borough councils have full authority over education, but delegate their powers to education committees which consist of members of the council and co-opted members who are acquainted with the various needs of schools.

The Government pays very large grants to the local councils. Fully fifty per cent. of the cost of the maintenance of the elementary schools is paid in grants. Besides the "annual grant," which is proportionate to the average attendance, there is an "aid grant" which takes the place of a grant formerly given to voluntary schools, a "fee grant" in lieu of fees, and grants for special subjects such as cookery, dairy work, and gardening.

The Act of 1902 stimulated the establishment of secondary schools. Instead of granting free tuition in these schools, a system of scholarships was established. These scholarships afford to poor children of intellectual promise the opportunity of gaining instruction in higher schools, and of rising in social life and usefulness. About thirty-five per cent. of the pupils in the secondary schools recognized by the Board of Education are holders of scholarships, which may include tuition, books, travelling expenses, and even maintenance grants.

Any school may come under the authority of the Board of Education if it is willing to be inspected by the Government school inspectors. If the standard of the school is equal to the minimum required by the Code, the school may participate in the grants. There are, however, a number of richly-endowed Public Schools in England, such as Eton, Rugby, and Harrow, that are outside

the control of the Board of Education. They do not require financial aid from the Government, and their social and traditional status is so high that there is no difficulty in maintaining an attendance equal to their capacity. So much stress has been laid of late on the value of government oversight, that Eton has asked for government inspection, not for the sake of financial aid, but for the assurance of its patrons that the standards of the curriculum have been maintained. These Public Schools have long enjoyed an enviable reputation for the quality of their teaching and for the high standard of honour set for their pupils, whether in the school-room or on the athletic field, which is reflected in the character of the public life of England.

The Board of Education has encouraged the local councils and committees in organizing medical inspection of schools, open-air schools, and classes for sickly children. Remarkable progress has been made in providing the training necessary to equip boys and girls for industrial, commercial, and home life. The chief agencies for this practical education are schools for continuing the elementary work, day industrial schools, and evening schools. These schools are in large measure meeting the demands for efficiency in the education of a great manufacturing and commercial nation.

SCOTLAND

Scotland is entitled to take rank as the pioneer in the movement to establish a system of education for all the people. As early as the reign of James IV, there was passed a statute which ordered all barons and freeholders "to put their sons at school," under a penalty of £20. In the scheme of government drawn up by John Knox, in 1560, of which education was a leading feature, the rich

were to educate their sons at their own expense, while the children of the poor were to be educated at the expense of the Church.

The early schools of Scotland were conducted in connection with the monasteries, and were intended to train students for the service of the Church, and for positions under the government. After the reformation the control of the schools was transferred to the presbyteries.

A SCHOOL IN EVERY PARISH

By an Act passed in 1696, a school was to be established in every parish. This Act, which revised an Act passed fifty years before, contained the essential features of a system of education. It provided for compulsory attendance, supervision of schools, and taxation for school purposes. It devolved upon the Church to see that the provisions of the law were carried out.

For the greater part of two centuries the schools remained under the control of the Church. These parish schools were not for elementary instruction only; they also prepared students for the unversities, three of which were established in the fifteenth century—St. Andrews (1413), Glasgow (1450), and Aberdeen (1494). In 1861 the universities were given control of the examination of teachers, which had been previously conducted by the presbyteries.

EDUCATION SINCE 1872

But of much greater importance were the changes made by the Act of 1872, which abolished the ecclesiastical control of the schools, and organized an education department (Committee of Council) to administer the various agencies for both elementary and secondary education.

In its essential features this Act is similar to the Act of 1870 in England. It differs in two important respects, however. The English Act took cognizance of elementary education exclusively; the Scotch Act provided for a system of graded schools which form the connecting link with the universities. In the English Act the enforcing of compulsory attendance was made dependent upon the local authorities; the Scotch Act provided for enforced attendance upon all children between stated ages.

By this Act the parish schools were superseded by a uniform system of schools in every parish and every burgh, to be controlled by local school boards, and maintained partly by government grants and partly by taxation levied by the local boards.

The Department of Education, created by this Act, administers the government grants for educational purposes, determines the conditions on which the schools may share in the grants, and maintains a system of school inspection.

An Act of 1886 brought the various classes of secondary schools under the inspection of the Department of Education. These included the high schools, which came under the Act of 1872, the endowed schools, the private schools that might apply for inspection—the two latter classes of schools to pay the cost of their inspection.

Provision has been made for the professional training of teachers for both the elementary and the higher grades. For the latter there are training colleges in connection with the universities.

Continuation classes have been established, to continue the education of those who have completed their course of elementary instruction, and do not intend to pass on to the secondary schools. These may be either day or evening schools, and they provide courses of study

which prepare for entrance into the technical colleges, with which Scotland is well supplied.

Another striking feature of educational progress in Scotland is the attention given to the medical inspection of schools, and to the establishment of cooking centres in connection with the schools. The Scottish people have set before themselves the duty of seeing not only that their children shall be properly taught in school, but that they shall be taught under healthful conditions, and be properly fed and clothed, thus maintaining the high standard that has always been characteristic of Scottish education.

IRELAND

The religious dissensions that marked the history of Ireland for centuries barred the way to progress in education, which was in an almost hopeless condition as late as the first quarter of the nineteenth century.

It was not till near the close of the eighteenth century that the penal laws, enacted in the reigns of William III and Anne, were repealed. These laws imposed harsh restrictions upon the Roman Catholics, who could neither have their children educated at home nor send them abroad to be educated. One product of these iniquitous laws was the "hedge school," where "the teacher and his pupils met feloniously to learn" in secret places where they might escape the severe penalties of the law.

The Catholic Emancipation Act was passed in 1829, and two years later the first steps were taken to establish a system of national education in Ireland. Previous to this time there were elementary schools, mostly Protestant, conducted by certain societies, the chief of which was the Kildare Society, besides Roman Catholic schools of different kinds, among which were the "pay" schools,

that were mainly the lineal descendants of the old hedge schools.

NATIONAL EDUCATION

The Act of 1831 created a Board of Commissioners for national education, and placed the control of elementary education in the hands of these Commissioners. The Board was originally composed of seven members. Shortly after its creation, a paid commissioner was added to the Board, as the executive head; he was given the title of Resident Commissioner and had his office in Dublin.

In 1861 the Board was reorganized and constituted in its present form, the number of its members being increased to twenty—ten Roman Catholics and ten Protestants. The members of the Board are representative men who are regarded as strictly impartial in religious matters.

The schools under the control of the Board may be denominational—either Roman Catholic or Protestant—or mixed, in respect to religion. The religious susceptibilities of the people are guarded by a conscience clause, which ensures the parents' complete control over the religious instruction of their children.

It is the duty of the Board to see that the details of the educational system are properly carried out, to control the selection of text-books, and to administer the government appropriations for education, which depend, to some extent, upon the amounts provided through local contributions. The commissioners have direct control of the model schools, which serve as practice schools for teachers in training in the normal schools and training colleges.

The annual expenditures for teachers' salaries and other branches of school maintenance are largely borne

by the Government, the local authorities providing a very small percentage of the cost of education. The Government also furnishes text-books in the secular branches, at small cost to the pupils. The local authorities—the patron or the school managers—appoint teachers, arrange the details of school work, and direct the inspection of the schools.

By the Education Act of 1872, parents were relieved, in whole or in part, of the payment of school fees, with the result that in a few years there was a very small percentage of schools in which fees were imposed.

An intermediate education board, established in 1878, conducts examinations of intermediate and secondary pupils, and, on the results of these examinations, payments are made to the schools, in proportion to the success of the pupils. A large number of schools conducted by religious bodies receive Government aid, on complying with certain conditions. The preference for denominational schools, which are exclusively Protestant or exclusively Roman Catholic, has prevented the complete nationalization of the educational system.

AGRICULTURAL AND TECHNICAL EDUCATION

Provision for agricultural and technical education is an important feature of the Irish national system. These branches are under the control of a department of agricultural and technical instruction, which expends annually in the extension of the work large sums obtained from Government grants, endowments, and other sources.

Summer schools are maintained to prepare teachers in technical and industrial work, and liberal allowances are made to meet the expenses of students who attend these schools.

For the purpose of developing and improving the agricultural interests, there are itinerant instructors in agriculture, agricultural schools and classes, experimental stations, and higher agricultural institutions, in which instructors in agriculture are trained.

The Irish people have reason to be proud of the present progress of their country in education. The illiteracy which formerly kept Ireland in the rearward rank has largely disappeared. The generous spirit which the opposing sections of the Irish people have exhibited, in turning from the brink of civil conflict to unite in defence of the Empire, will no doubt continue to show itself in the further elimination of those differences that have thus far prevented the nationalization of the school system of Ireland from being completely achieved.

CHAPTER XIX

EDUCATION IN THE UNITED STATES

WHEN the Puritans came to New England, there were among them a number of graduates of Oxford and Cambridge. The teacher was next in rank to the minister, and learning and godliness were regarded as inseparable. In 1635, Boston established her famous Latin School, which is still in existence. In 1639, Dorchester set the example of public taxation of the land for the establishment of a free school. In 1637, Harvard College was founded, the oldest American seat of learning. In 1642, the general court of Massachusetts enacted a law which made education compulsory and held the parents responsible for the instruction of their children in the principles of religion and in the more important laws of the country. Education was thus left in the hands of the parents, or to private teachers, or to such voluntary schools as the settlers might establish.

Another enactment of the general court of Massachusetts, in 1647, provided that townships with fifty families should appoint a teacher for all children, so that they might learn to read and write. Every town with a hundred families had to establish a grammar school. This Act recognized that the state had the right to control the parents in matters of education. The parents must provide the education privately, or they must raise the money by public taxation to defray the cost.

The schools of Massachusetts, previous to the Revolution, were superior to those of the other States. The schools were not free at first, as the early Puritans had

been accustomed to school fees in England. But the tendency was towards free schools, as the poor were compelled to attend, and there was too much of the democratic spirit among the people to favour any discrimination in rank.

There came a decline in the educational spirit previous to 1700. It may have been caused by the wars with the Indians and the French; but a more likely cause was the scattering of the population through the wilderness, after all danger of attacks by the Indians and the French had been removed. In the earlier days the people lived for greater security closely clustered around the church and the school. With the dispersal of the people over wider areas, the travelling school came into fashion; the school went to the pupils. Later, the central school broke up into schools conveniently situated for the pupils.

In 1780, the Constitution of Massachusetts was ratified and put into operation. It at once undertook state education; but a six-months' school took the place of an all-year school, and 300 families were necessary for the establishment of a grammar school. The early part of the eighteenth century was the darkest in New England for education and social culture. Children were taught writing only so far as to be able to scrawl their names, and very few could read with any facility. The Revolution did not usher in an educational revival. Under the local district system, by which the branch school districts became independent of the central authority, there came a period of petty politics, irresponsibility, small ideas, short terms, poor teachers, lack of oversight, and wastefulness.

In 1826 the law of Massachusetts was again changed, and no place with fewer than 500 families was compelled to support a grammar school. To take the place of the

decaying grammar schools, academies came into existence about the close of the eighteenth century. They had a good curriculum, and prepared students for college so successfully that the colleges were enabled to raise the standard of admission. These academies actually destroyed the grammar schools. Rich people sent their children to the academies, while the poor sent theirs to the public schools, and thus a class distinction arose. For nearly forty years, from 1785 till 1825, there was little progress in New England education. The schools had not kept pace with the progress of society in other respects. The academies furnished the better free schools with competent teachers, but the majority of the teachers had received no education beyond the course of study in schools they were attempting to teach. Massachusetts and Connecticut were usually the leaders in educational activities, although there were some notable schools and advanced legislation in New York, New Jersey, and Virginia. In 1816 the State of Indiana received its first constitution, took control of the public school lands, and provided a regular graded system of education from township schools to a state university, where tuition would be free.

HORACE MANN (1796-1859)

The revival of interest in elementary education is associated with the name of Horace Mann, who, after several years' practice as a successful lawyer, unselfishly devoted his great abilities to the improving of educational conditions.

In 1837, a Massachusetts Board of Education was created for the purpose of collecting information about the condition of the common schools, and Horace Mann, now in the prime of life, became secretary of this Board.

He at once began a campaign in behalf of education among the people to show the necessity for better schools, and to break down the barriers between the classes, by having the rich and the poor educated in the same schools. In 1838, he began the publication of *The Common School Journal* for the furtherance of educational projects.

The establishment of normal schools was the greatest work of Horace Mann. The first normal schools in America were opened at Lexington, Westfield, and Bridgewater, in the State of Massachusetts. The two last-named schools are in a flourishing condition to-day. He also organized rural libraries and teachers' institutes, following, in the case of the latter, Dr. Barnard, who, as Secretary of the Connecticut Board of Education, had organized in that State the first teachers' institute.

The several reports of Horace Mann to the Board of Education of Massachusetts not only influenced his native State, but aroused an interest in education in many other States; they have also had a great effect upon our system of schools in Ontario, because of the favour with which Egerton Ryerson regarded them. In Mann's first report he criticised the school-houses, the trustees, the examination of teachers, the text-books, the school attendance, the salaries of teachers, the neglect of registers and of school statistics. In other reports he discussed methods in reading, spelling, and composition; he condemned the A B C method and advocated the word-method of teaching reading; he also proposed consolidation of schools. In 1843 he visited schools in several European countries, and the results of his observations are embodied in his seventh annual report, in which he advocated the teaching of music and drawing, the teaching of arithmetic by analysis rather than by rule, object lessons, language exercises, geography from

the standpoint of the child's environment, and other improvements on the methods which were used in the schools of that time.

Mann resigned the position of secretary of the Board of Education in 1848, and after serving as a member of Congress for five years, he became President of Antioch College, in Ohio, where he died in 1859.

Massachusetts set an example for many of the other States, in establishing a central state authority. Some States formed a board of education; others appointed a superintendent or commissioner of education. In some cases the central office had a great deal of authority over the educational affairs of the State; in others it was merely a bureau for collecting information about the condition of the schools. The work of Horace Mann, and the writings of Pestalozzi, Herbart, and Froebel have been very influential in determining the subject-matter, the method, the aim, and the discipline of the schools of the United States.

CHAPTER XX

EDUCATION IN CANADA

ONTARIO

By the Constitutional Act of 1791, Canada, or more properly, the "Province of Quebec," was divided into two provinces, Upper Canada and Lower Canada. After fifty years of separation, they were re-united in 1841. By the British North America Act of 1867, they were again divided into the provinces of Ontario and Quebec, each with well-defined powers and jurisdiction over matters of local interest, including education. At the same time they were formed, with the other provinces, into a federal union known as the Dominion of Canada.

In 1791, the inhabitants of Upper Canada were very few, probably not more than 20,000, and according to the first report on population, there were only 95,000 in 1814. With the exception of a few French fur-traders, the earliest settlers of the province were United Empire Loyalists and immigrants from the British Isles. Afterwards came French from Lower Canada, Germans from their home land, and Dutch from Pennsylvania. People of the same race sought out homes near one another, so that we find whole blocks of land occupied almost exclusively by English, Highland Scotch, Lowland Scotch, Irish, French, or German. The racial and religious jealousies of these groups of settlers hampered the early efforts to secure responsible government and religious liberty—privileges which were eventually secured only after bitter conflicts and the shedding of blood.

Previous to 1841, the lieutenant-governors of Upper Canada were usually autocratic; their immediate advisers were the members of the executive council, who were appointed by the lieutenant-governors, and were not responsible to the legislative assembly. True, this assembly was elected by the qualified voters of the province, but its members had little real power. The legislative assembly did, however, accomplish some useful work. It made investigations and issued reports which showed the real needs of the province, and by its petitions to the British government it checked the chief abuses and restrained the autocratic tendencies of the governing bodies.

JOHN GRAVES SIMCOE

When John Graves Simcoe came to Upper Canada in 1792, as its first lieutenant-governor, he was impressed with the need of education for the new province, but he found the means of providing it lacking, and a disposition on the part of the people to send their sons to academies in the Unites States. A spirit of patriotism, accordingly, urged him to ask the home government to make provision for education within the province.

Simcoe's plan was to establish a university and grammar schools. Following the practice in the old land, the needs of the so-called upper classes were to be met first. Provision for elementary schools, or schools for the lower classes, was to come later; at that time the education of the common people was considered a work for charity or for private enterprise.

No one can question the sincerity of the Governor's intentions, but his plan, when carried out years afterwards, was productive of much strife. The university and grammar schools were dominated by the Anglicans, and, as a

result, there arose in many quarters of Upper Canada great hostility to sectarian influences in educational affairs. But the governors and their executive councils, who were strongly entrenched, looked upon each movement towards greater freedom and equality of privilege as an act of disloyalty and an indication of a spirit of revolt similar to that which had separated from the motherland the colonies now forming the United States.

In 1798, on the recommendations of the executive council and the judges of the Crown, nearly 550,000 acres of crown lands were set apart to establish and maintain a provincial university, and a "free grammar school" in each of the four districts: Western, Newark, Midland, and Eastern—the schools to be at Sandwich, Niagara, Kingston, and Cornwall respectively; but no further steps were taken until after 1807. Before 1800, there were, however, private schools in a number of places. Finally, an Act of the legislature, in 1807, provided for the establishment of a "public (grammar) school" in each of the eight districts into which the province was then divided, and for the appointment by the lieutenant-governor of not fewer than five "fit and discreet persons" as trustees in each district.

When Governor Simcoe proposed the establishment of these schools, he had in mind free grammar schools, but by the Act the pupils were to be charged heavy fees, and, as the schools were to be largely residential schools, they were evidently for the preparation of the sons of the ruling classes for the civil service and for professional life, not for the education of the poorer classes. In addition to the schools supported by the government, which increased as the number of districts increased, there were in 1816 about two hundred private schools. In some of these the instruction was of a high order, but there is

reason to believe that in many of them it was very inefficient.

Under the authority of an Act passed in 1824, Lieutenant-governor Maitland appointed a General Board of Education, with power to direct the appropriation of the legislative grants and to exercise some general superintendence over education. The dominating personage of this Board was its chairman, the Rev. Dr. Strachan, afterwards Bishop Strachan, who thus was practically the superintendent of education for the province, until the Board ceased to exist, in 1832.

JOHN STRACHAN

No history of education in Upper Canada is complete without some consideration of the work of Bishop Strachan. Educated at King's College, Aberdeen, Scotland, he came to Canada in 1799, at the age of twenty-one and after serving for some time as tutor in Kingston, he became master of the grammar school at Cornwall and, later, at York (Toronto).

Dr. Strachan was a teacher of marked ability and forcefulness. He not only taught the Latin, Greek, and mathematics of the schools of England, but he gave an impetus to the study of geography and natural science. He taught all subjects with a view to their practical application, and his pupils were encouraged to become the questioners of their fellow-pupils rather than the passive recipients of knowledge.

For several years Dr. Strachan was a member of the executive council and an influential adviser of successive lieutenant-governors. He believed in the necessity of establishing the Anglican Church in Canada, and of training the people to obey constituted authority. Uncompromising in his opinions, he regarded any

opposition to his plans as an act of treason; he was, indeed, one of the autocrats who provoked the hostility that ended in the rebellion of 1837.

By 1826, the establishment of the long-projected university seemed at last possible of realization, and in that year Dr. Strachan, then Archdeacon of York, was sent to England to secure a royal charter. The charter, which was granted in 1827, gave the Anglicans the control of the university, which was to be known as King's College. When the legislative assembly met in 1828, it protested against the maintenance of an Anglican institution out of public funds, for its main support was derived from an endowment of crown lands.

JOHN COLBORNE

Sir John Colborne, who became lieutenant-governor in 1828, showed prudence as a ruler. He saw how inefficient were the district grammar schools; he recognized that so long as free-grant lands were available for settlers the revenue of King's College from the school lands would not be large at first; and he insisted that no money should be spent on buildings till some changes were made in the charter of the university. But on one occasion Colborne did act very autocratically. In 1829, on his own authority, he replaced the grammar school at York by Upper Canada College, and succeeded in having over 6,000 acres set aside from the school lands as an endowment for this college, which was to be managed after the fashion of the great English public schools of Harrow, Eton, and Rugby.

The diversion of school lands to the support of King's College and Upper Canada College at York aroused opposition from other parts of Upper Canada on the ground that their claims to educational facilities had not

been considered. The agitation also against the religious tests and sectarian domination of King's College kept this institution from being opened. Indeed, matters came to such a pass that on two different occasions the British government suggested that the old charter should be returned and a new one issued. When the rebellion broke out in 1837, the opening of King's College was again deferred, and it was not till 1843 that it was opened, with Dr. Strachan as its first president.

As a protest against the Anglican control of Upper Canada College, the Methodists, in 1831, laid the foundations at Cobourg of the Upper Canada Academy, which was opened in 1836; and, in 1840, the University of Queen's College was founded at Kingston, to be under the control of the Presbyterian Church, but open to students of all denominations.

BEGINNINGS OF COMMON SCHOOLS

The common, or elementary, school in Canada had its beginning in the small schools that the chaplains of the garrisons formed in the neighbourhood of the military posts. The first legislation looking to the establishment of common schools was the Act of 1816. By this Act any group of settlers could open a school wherever twenty pupils could be found. They were required to appoint three "fit and discreet persons" as trustees, who were empowered to examine into the teacher's "moral character and capacity," and to make regulations for the government of the school. These regulations, the text-books in use, and other details, the trustees were required to report to the Board of Education, appointed in each district by the governor. They would then receive a share of the government grant of £6,000, which was to be apportioned among these common schools.

The condition of general education among the people in Canada was at that time very low. Merely to make a living was a strenuous task. The people were crude in their manners and intolerant in their opinions, but they were full of courage and manly independence. The stories of these early settlers are full of incidents that reveal their sturdy character in confronting and overcoming obstacles, and in no respect is this more apparent than in their efforts to secure for their children the advantages of education.

The school-houses were log shanties about twenty feet long by twelve feet wide, and were lighted by windows that were very small, owing to the cost of glass. The benches were pine slabs, frequently held together by willow withes in lieu of nails, and the desks were sometimes only logs flattened with the axe. The fireplace was smoky, and did not warm the whole room, so that, in the words of an old teacher, "the school-house was cold, dark, and dismal."

The teachers received about ten dollars a month, and paid one dollar a week for board, "washing included." Later, they received free board by the plan of "boarding round" among the different families. These teachers were often men who had failed in other walks of life through intemperance or inefficiency; and among them were adventurers and hedge schoolmasters of the Ichabod Crane type, who had come in from the United States. There were, however, a few teachers who did excellent work for very little pay, and some ambitious young men who taught school as a stepping-stone to other professions. The writers of the time lament that the teachers remained so short a time in their schools: "A teacher of twelve months is a prodigy." These same writers also regret the poor scholarship of the teachers. They had,

indeed, little opportunity for self-improvement. Books were very scarce; few people could read books, and still fewer had money to buy them. In 1816, the district boards of education were authorized to purchase and distribute text-books. By the Act of 1824, the duty of examining and certificating teachers of schools in receipt of government grants was transferred to these district boards.

In 1841, the Provinces of Upper and Lower Canada were re-united under one legislature, and two years afterwards a very liberal and comprehensive Educational Act was passed. The sum of fifty thousand pounds was granted for the "maintenance and support of common schools," of which Upper Canada was to receive forty per cent.—the amount proportionate to its population. This percentage was increased with the increase of its population. Another important provision of the same Act recognized the rights of religious minorities to have separate schools "upon the application of ten or more resident freeholders or householders of any school district." By this Act, also, the Secretary of the Province became, ex officio, the Chief Superintendent of common schools, and provision was made for the appointment of an assistant superintendent; municipal councils were also authorized to appoint local superintendents of schools, to whom were assigned duties somewhat similar in character to those now performed by the public school inspectors. These superintendents also had power to examine teachers and to grant certificates, which were valid for one year in their own superintendency.

EGERTON RYERSON

In 1844, Dr. Egerton Ryerson was appointed to the office of Assistant Superintendent of Common Schools, a

name that was changed in the legislation of 1846 to Superintendent of Schools, and by the Act of 1850 to Chief Superintendent of Education. The name of Ryerson is so closely associated with education in Upper Canada that no history of Canadian education would be complete without some account of his life. He was born on a farm in the county of Norfolk, in 1803, his father being a United Empire Loyalist who had left New Jersey at the close of the Revolutionary War. Young Egerton attended the grammar school at Vittoria, in Norfolk, which was afterwards removed to London. He was eager to become a Methodist minister and, contrary to the wishes of his father, he left the farm to enter the church.

Early in his career he was drawn into a controversy with Dr. Strachan, who was endeavouring to secure recognition for the Anglican Church as the Established Church of Canada, and to maintain its claim to a monopoly of the Clergy Reserves—crown lands which had been set apart by the Constitutional Act of 1791 for the support of a Protestant clergy.

In 1829, the Methodists established *The Christian Guardian* as the official newspaper of their church, and Ryerson was elected its first editor. This paper at once became a great exponent of popular and non-sectarian education. As the rebellion of 1837 drew nigh, Ryerson veered from the extreme views of his former radical friends, who, in consequence, became very hostile to him. In 1835 he gave up the editorship, and was sent to England to obtain funds and a charter for the new Upper Canada Academy, then nearing completion at Cobourg. He was successful in his mission, and the Academy was opened in 1836.

After the rebellion had been crushed, the party of special privileges was still supreme; and Ryerson, in 1838,

resumed the editorship of *The Christian Guardian* and continued to protest against the Anglican claims. He ably supported Lord Durham and Lord Sydenham in their efforts to secure responsible government for Canada.

RYERSON FIRST PRINCIPAL OF VICTORIA COLLEGE

In 1841, Lord Sydenham signed a bill which gave Upper Canada Academy the status of a college with university powers. It was now called Victoria College, and in 1842 Dr. Ryerson was installed as Principal. In 1843, Lord Metcalfe, the new Governor of Canada, had trouble with his executive council, and Ryerson supported the Governor, much to the annoyance of many of his friends. Some hostile feeling was aroused against him, and when he was appointed Superintendent he was accused of toadying to the Governor for the position. However this may have been, the appointment proved to be an excellent one, and the high position of Ontario in education is due in great measure to the clear foresight and business acumen of this great educator.

Dr. Ryerson went to Europe in November, 1844, and remained abroad till December, 1845. On his return he made an elaborate report on the school systems of Great Britain and Ireland, France, Holland, Prussia, Saxony, and Switzerland, and of the States of New York, Massachusetts, and Connecticut, which he had visited on his way to Europe.

From Prussia, Dr. Ryerson learned the value of the central control of the machinery of education and the advantages of trained teachers. Ireland furnished him with a solution of the religious difficulties in education, and also gave him the idea of uniform text-books. In Massachusetts, he saw how efficiently schools could be managed by popularly elected boards of trustees acting

under the control of the central bureau of administration and receiving grants conditionally upon compliance with the regulations of this bureau.

RYERSON'S REPORT

The report of Dr. Ryerson consisted largely of quotations from the reports of Horace Mann and the European educators. In this report he wished to prepare citizens to perform "their appropriate duties and employments in life, as Christians, as persons of business, and also as members of the civil community in which they live." He wished to see a universal education suited to the needs of the country. He would give education a religious foundation, but he would not allow dogma or sectarian teaching. He would teach the essential truths of religion and morality, the history of the Bible, its institutions, cardinal doctrines and morals, and its authenticity. Like Horace Mann, he enumerated not only the subjects that should be taught but the methods of presentation. He would teach grammar and geography inductively, science by experiment, and arithmetic by means of concrete material. He would not have a narrow curriculum of the three "R's." He would enrich the curriculum with music, drawing, history, civics, nature study, agriculture, physical training, hygiene, and political economy. In fact, as he himself stated, he aimed to "secure and perpetuate the inestimable blessings of a free, comprehensive, and Christian education for every child in the land."

He found the text-books very unsuitable, and the teachers incapable of giving much oral instruction. The pupils learned the lessons in their text-books by rote, worked problems by rules without understanding the principles, and learned set answers to set questions. To

remedy these defects, and to improve the status of the teacher, he introduced the text-books used in the national schools in Ireland, and proposed the establishment of normal schools.

He also saw the need of central control and efficient inspection. The government should exercise control over the schools to see that the legislative grants were judiciously expended, and that the conditions upon which these grants were to be paid had been fulfilled. It should also prepare regulations governing the general character and management of the schools, and the qualifications of teachers. The trustees should make the appointments. The government should also, according to this report, recommend suitable places for school-houses, and should try to establish school libraries. To effect these ends the government must provide for licensing teachers, and must establish an efficient system of inspection of the condition and management of the schools.

THE ACT OF 1846

The Common School Act of 1846, framed in accordance with the terms of Ryerson's report, forms the basis of our present school system. This Act defined the duties of the Superintendent of Schools. A normal school and a model school for practice teaching, were to be established. A Board of Education was formed to advise the Superintendent, manage the normal school, and recommend text-books. The local district superintendents, or inspectors, as we now call them, became very important officers. The Act of 1843 had failed because there had been no provision made for its enforcement. These inspectors were to see that the legislation was carried out. Our present method of electing trustees was adopted, by

which one of the three members elected in a school section retires annually. This gave continuity and stability to the life of the board and, at the same time, made it responsible to the electors. The Act empowered the trustees to raise funds over and above the legislative grants, by rate-bills, levied upon parents. The great work that Ryerson here performed was to strengthen the central authority. The Government grant to schools was placed at the disposal of the Superintendent and was a powerful agency in inducing school boards to provide proper text-books, buildings, equipment, and teachers. An Act of 1847 empowered city councils and the police boards of towns to appoint boards of trustees, composed of not more than six members—one third of the members to retire annually.

Ryerson aimed at abolishing school rates, but had been forced to withdraw the first bill he presented for free schools. By the Act of 1850, he obtained permissive legislation which allowed the ratepayers of a school section to determine whether fees should be paid by the pupils. By this Act, too, trustee boards were strengthened by being made corporate bodies, with full power to levy taxes or rates upon the section which they represented. The payment of the salaries of teachers was thus assured. A local board of public instruction, consisting of the local superintendents of schools and trustees of the grammar schools, was appointed for each county. The board was to grant certificates to teachers and to perform other duties of an educational character. The central Board of Education, constituted by the Act of 1846, was changed to the Council of Public Instruction. This Act of 1850 is called the charter of the Ontario school system.

THE GRAMMAR SCHOOLS

An Act relating to grammar schools was passed in 1853. It provided for their better maintenance, and for the appointment of a committee to examine and grant certificates to grammar school teachers; it prescribed a course of study; and it vested the appointment of trustees in the municipal councils of cities and counties. Provision for inspection was made in 1855. The first inspection of the grammar schools showed that about one half of them were doing good work, and that half of the headmasters were graduates of British or Canadian universities. The buildings, equipment, and grounds were, however, severely criticised.

The grammar schools increased in number very rapidly, but were often of inferior character, as the rapid increase in numbers necessitated the employment of teachers with lower qualifications. By the School Act of 1871, the name grammar school was changed to high school. In this Act, provision was made for an advanced English education, including the natural sciences and commercial subjects. The study of Latin, Greek, and the modern languages was made optional. As a result of the changes, the decline of classical learning was feared, and, to prevent this, provision was made for a superior class of high schools called collegiate institutes. These were to receive larger grants and were required to have at least four specially qualified masters and an average of sixty pupils in Latin or Greek. The fear that led to their establishment turned out to be groundless, but they were retained with a standard higher than that of the high schools in regard to teachers' qualifications, equipment, accommodation, and the number of teachers on the staff. This Act also introduced the system of "payment by results," or paying a grant to a high school according to

the proficiency of its pupils, as shown at an examination. In Ontario, as in England, this system was found to be prejudicial to the best interests of education, and was abolished after a few years' trial. The improvement of the high schools has been very great since the time of Ryerson, but it was he who laid the foundation of what is admitted to be one of the best secondary school systems in existence. In this work he was aided by the advice of his great inspector, George Paxton Young.

FURTHER PROVISIONS OF THE ACT OF 1871

The Act of 1871 abolished the office of local superintendent, and provided for the appointment of inspectors of public schools—the name by which the common, or elementary, schools were henceforth to be known. It also made attendance at the public schools, for at least four months in each year, compulsory for children between seven and twelve years of age. It provided also for a provincial entrance examination for admission to the high schools. But the most important provision of the Act was that which abolished the payment of fees by pupils in the public schools, thus establishing the system of free elementary education for which Ryerson had long striven.

THE TRAINING OF TEACHERS

Dr. Ryerson had been greatly impressed by systems for the training of teachers which he had observed when abroad. The Dublin Normal School impressed him most, and our first normal school was organized after this type. The legislature, in 1846, granted £1,500 for a normal school building and £1,500 per annum for maintenance. The Toronto Normal School was opened in 1847. Its first principal was Thomas Jaffray Robertson,

who came to Toronto from the chief inspectorship of the National Schools of Ireland.

The students of the Normal School were required to be sixteen years of age and of good character, to be able to read with expression and write legibly, and to be acquainted with the four simple rules of arithmetic. If the student declared his intention of devoting himself to teaching, he was not charged for tuition or books. Most of the candidates at first had no high school training, but came directly from the elementary schools. The Normal School was generally approved, and the teachers trained there were in great demand. In 1853, Ryerson suggested normal training for grammar school teachers, and the Act of 1855 provided for the erection of a model grammar school in connection with the Normal School. In 1858, this school was opened to pupils from all parts of the province, but, as comparatively few of its pupils came from outside of Toronto, and no teachers presented themselves for training, objection was made to supporting out of the general funds what was practically an additional grammar school for Toronto. It was, therefore, closed in 1863.

Between 1853 and 1871, a dual system of issuing public school teachers' certificates prevailed. The Council of Public Instruction issued to normal school graduates certificates of all grades valid in public schools throughout the Province, and the county boards of examiners issued certificates of all grades valid only in the county of issue. The Act of 1871 provided for the uniform examination and classification of public school teachers, whereby first class certificates were issued by the Council of Public Instruction, and second and limited third class certificates by county and city boards of examiners,

appointed by county councils and boards of public school trustees respectively. The first and second class certificates were permanent and valid throughout the Province.

SEPARATE SCHOOLS

The pioneers feared very much that secular schools would become godless schools; yet it was impossible to have separate schools for each denomination. In the Act of 1843, as we have seen, there was a provision which allowed the establishment of dissentient schools, with a right to share in the school funds. In the Act of 1850, a clause compelled the school board of any city, town, or incorporated village, upon the request of twelve or more resident heads of families, to establish a separate school for either Protestants or Roman Catholics in any school section where the teacher of the common school was, in the former case, a Roman Catholic, and, in the latter case, a Protestant. There were, in 1850, only fifty-one separate schools in Upper Canada, of which nearly one half were Protestant. When the Confederation resolutions were being discussed, the delegates were unanimous that the religious rights of minorities in both Upper and Lower Canada should be protected by the perpetuation of separate schools, and provision was made for this in the British North America Act. In 1882, the government appointed special Roman Catholic inspectors of separate schools. In 1906, by a judgment of the Privy Council, it was affirmed that the teachers of a separate school shall be subject to the same examinations and receive their certificates of qualification in the same manner as public school teachers generally. This decision has been duly carried out with satisfactory results.

RETIREMENT OF DR. RYERSON

Although, previous to his appointment, Ryerson had rendered himself liable to the charge of partisanship in politics and religion, he administered the affairs of his office with liberality and fairness. He brought about the adoption of many of his schemes for the improvement of educational standards by his powers of persuasion and his dogged determination. He did not follow public opinion, he moulded it, and dominated every department of educational activity. He was an indefatigable worker; he supervised closely the work of subordinate officials, the finances, and all legislation affecting the schools. He was not original in his plans, but he was sagacious in his choice of the schemes of other lands and in adapting them to conditions on Ontario. His mind was extremely practical and his work systematic.

Dr. Ryerson long chafed under the restraint, imposed by constitutional practice, of not being permitted to explain, on the floor of the legislative assembly, the educational policies for which he was responsible. He could not even defend them without incurring the charge of being a political partisan. In 1868, he asked to be relieved of his duties as Superintendent, and he recommended a change in educational administration, in the following words: "Our system of public instruction has acquired such gigantic dimensions, and the network of its operations so pervades every municipality of the land, and is so interwoven with our municipal and judicial systems of government, that I think its administration should now be vested in a responsible minister of the Crown, with a seat in Parliament." He retired in 1876, and devoted himself to literary work; the most important of his writings is *The Loyalists of America*. He died in 1882.

Dr. Ryerson will always be remembered with gratitude for his untiring efforts to bring education within the reach of all the people, and for his faith in education, not only as an intellectual force, but also in its power to uplift the moral and civic life of the Province.

MINISTERS OF EDUCATION

ADAM CROOKS

By the Act of 1876, which abolished the office of Chief Superintendent of Education, the administration of the educational interests of the Province became vested directly in the executive council, and the duties previously performed by the Superintendent devolved upon one of its members, who was called the Minister of Education. At the same time the Council of Public Instruction gave place to a Central Committee, composed of prominent educationists, with power to conduct examinations, and to perform other defined duties, under the direction of the Minister.

The first Minister of Education was Adam Crooks. The main feature of his administration was the establishment, in 1877, of county model schools, for the professional training of third class teachers.

GEORGE W. ROSS

He was succeeded, in 1883, by George W. Ross (Sir George), whose efforts were directed towards uniformity in educational matters. He aimed at unifying the public schools, the high schools, and the universities into an orderly system, with progressive gradations "from the kindergarten to the university"—a system similar to that which Dr. Strachan had in view, sixty years before, in promoting the establishment of a university to "complete a regular system of education from the letters of the al-

phabet to the most profound investigations of science." In later years there has been a vigorous reaction against this tendency, as the course leading to the university and the professions cannot suffice for the educational needs of those who wish to enter upon other walks of life.

Both Ryerson and Crooks had deplored the evil results of a multiplicity of text-books, but conditions were unfavourable for grappling effectively with the evil. Ross planned to have one authorized text-book in each subject, and was partially successful.

Kindergarten instruction was introduced into the Province in 1882, the first kindergarten class being opened in that year in Toronto. In 1885 the kindergarten was recognized as part of the provincial school system, and provision was made for training properly equipped kindergarten teachers.

The high school entrance examination, which was instituted in 1871, had come to be generally regarded as marking the completion of the public school course, and, for those who did not attend the high schools, it generally meant the end of their school training. A higher examination, called the public school leaving examination, was instituted, in 1891, to induce pupils who did not propose to attend high school to remain longer in the public school; but the plan proved ineffective. In 1896, therefore, continuation classes in the public schools were established for the purpose of providing a general education beyond that to be obtained in the regular public school course. These classes became in time continuation schools. They are, in reality, rural high schools, and they place the advantages of secondary education within the reach of those who are inconveniently situated with respect to high schools. That these schools have supplied a necessary link in our educational system is shown

by their great increase in numbers since they were first organized.

When Mr. Ross became Minister of Education he changed the system of conducting the examinations for teachers' certificates. The examiners then were generally without experience in teaching and were frequently undergraduates or graduates fresh from the universities. He raised the qualifications of examiners and restricted their appointment to members of the teaching profession. He also provided for a wider professional course for teachers by extending the model school term from six weeks to three months, and the normal school term from four months to six months.

Mr. Ross was one of the first of our public men to see the possibilities of the vast district known as New Ontario, and, with a view to giving practical and scientific training to those engaged in the mining industry, he established, in 1894, summer classes in different parts of the district for short courses in mining.

To Mr. Ross is also due the establishment of Arbor Day and Empire Day—the former to give the school children an interest in making and keeping the school grounds attractive, and the latter to inspire the children with a spirit of patriotism.

Other features of the Ross administration were the enlargement of the free library system of the Province by changing the former mechanics' institutes into public libraries; the addition of Canadian history, household science, and manual training to the public school course; the provision for military training, and for the teaching of agriculture, household science, and manual training in the high schools; the establishment of art schools; and the initiation of a scheme of university federation under the Federation Act of 1887.

In 1885, training institutes were established at different centres in the Province for the purpose of providing professional training for teachers who were preparing for first class and high school assistants' certificates. These institutes were united, in 1890, into a School of Pedagogy at Toronto, which was transferred to Hamilton in 1897, and known as the Normal College.

RICHARD HARCOURT

Mr. Ross became Premier of the Province in 1899, and was succeeded by Richard Harcourt as Minister of Education. During Ryerson's occupation of the superintendency, he had seen the necessity for increased facilities for the professional training of teachers. A second normal school had, therefore, been opened at Ottawa in 1875. Mr. Harcourt made further provision for this work by the opening of a third normal school at London in 1900; he also extended the normal school term to one year. The professional training of third class teachers was provided for, as we have seen, in the county model schools. The normal school training was reserved for teachers-in-training preparing for second class certificates.

ROBERT A. PYNE

In 1905, Dr. Robert A. Pyne became Minister of Education in the Whitney government, and many important changes have been brought about during his administration. He revived the superintendency of education, with the view of having, in an advisory capacity to the Minister, an official whose expert knowledge would qualify him to make recommendations on matters relating to education. In 1906, Dr. John Seath was appointed Superintendent of Education. Dr. Seath had been for over twenty years a high school principal, and, since 1884,

a high school inspector; and, as a departmental officer under the Ross and Harcourt administrations, he had had a wide and varied experience in the organization and management of the schools of the Province.

In 1908, the county model schools were abolished, with the exception of a few which have been brought more directly under the control of the Department of Education, and which give the professional training required for district and limited third class certificates. These certificates are valid only in the sparsely settled districts, and in the counties where teachers with at least second class certificates cannot be obtained after due advertisement and the offer of a reasonable salary. The object of this change was to improve the quality of the teaching by demanding of the teacher a higher grade of certificate; in accordance with this policy the number of normal schools has been increased to seven. In 1909, the professional training of high school teachers and first class public school teachers, which, under the Ross régime, had been carried on at the School of Pedagogy, Toronto, and afterwards at the Normal College in Hamilton, was transferred to the Faculties of Education of the University of Toronto and Queen's University.

With the improvement in scholarship and professional training, the salaries of teachers have been very materially advanced. Another step that has tended to advance teachers' salaries and to induce them to remain longer in the profession, is the provision by which a part of the legislative grant to a school is made to depend upon the amount of the teacher's salary, the grade of his certificate, and the length of his experience. As, moreover, part of the grant is also given on the suitability of the accommodation and the value of the approved equipment, the condition of the schools themselves has greatly improved.

The change in the basis of apportioning the legislative grants to public and separate schools has led to a marked increase in these grants, which have more than doubled within the last ten years.

By the University Act of 1906 was completed the federation initiated in 1887. This system now includes Victoria University and Trinity University, which hold in abeyance their power to grant degrees in Arts, and University College, together with several professional colleges and faculties, the whole being known as the University of Toronto. By this Act, also, important changes were made in the administration of the University of Toronto, and the finances of the institution were placed on a more satisfactory basis. The government has become responsible for a considerable share of the expenses of maintenance, and has assigned for this purpose fifty per cent. of the average annual receipts from the succession duties, but not to exceed $500,000.

The Industrial Education Act of 1911, one of the most important features of the Pyne administration, makes provision for industrial, technical, and art training, and for the promotion of agricultural and commercial instruction. Under it, vocational schools and classes have been established in many parts of the Province, and their number is rapidly increasing.

The Ontario Agricultural College, established at Guelph, in 1874, has taken an active part in preparing teachers for giving agricultural instruction in the schools, and the University of Toronto now provides courses for teachers in household science. In 1903, the Macdonald Institute, founded through the generosity of Sir William Macdonald, became part of the Agricultural College, and courses have been established in it for the training of teachers in the subjects of nature study and manual

training. A later and very important development of agricultural education has been the placing of graduates of the college as agricultural representatives in the counties, to assist the farmer by giving demonstrations and short courses of instruction in various branches of farm work, and also to organize societies for the promotion of a practical interest in the science of agriculture. Another important feature of our educational progress has been the establishment, at Toronto and Guelph, of five weeks' summer schools for the instruction of teachers in art, manual training, household science, and physical culture, and in the subjects that lead to higher grades of academic certificates.

There is also a summer school held annually in Toronto for the instruction of library workers. This has become necessary owing to the great impetus given to library extension through the system of travelling libraries and the organization of library associations under the provisions of the Public Libraries Act. The number of free public libraries in operation in 1914 was 157, and the legislative grants for maintenance amounted to nearly $20,000.

The standard of qualification for kindergarten teachers has been raised from time to time, and they must now hold normal school entrance certificates in addition to the necessary qualifications for their special work. The mode of conducting kindergarten instruction has produced a distinct cleavage between the kindergarten and the First Form classes. Provision has accordingly been made for bringing about a closer relationship by the establishment of kindergarten-primary courses, which are intended to preserve the freedom and play-spirit of the kindergarten in harmony with the more orderly work of the grades. Kindergarten-primary

certificates are granted to teachers who qualify for this department of work at the normal schools or at the summer courses.

The policy of having one text-book in each subject has been carried into effect. The Department of Education controls the preparation of the contents, the workmanship, and the price of each text, and the result has been an improvement in the character of the books and a great reduction in their price to the public.

The inspectors of the public schools have been given fewer schools to supervise, and they have been brought more under the control of the Department of Education. Special provincial inspectors have been appointed—a chief inspector of public and separate schools, inspectors of continuation schools, an inspector of manual training and household science, an inspector of public libraries, a director of technical education, and a director of elementary agricultural education. The high school and separate school inspectors have always had provincial jurisdiction; their number has been increased.

The high schools and collegiate institutes have made great progress in numbers, equipment, buildings, and attendance, and in the scholarship of their staffs. They furnish the academic preparation for teachers of the elementary schools and the lowest grade of high school teachers, and fit the pupils for entering the commercial and professional occupations.

Courses in manual training, art, household science, and agriculture in both public and high schools have been extended and improved, and the teaching of these subjects is encouraged by very generous legislative grants.

In 1912, the Ontario College of Art was established in Toronto for the purpose of training students and

teachers in the fine and applied arts. Free summer and spring classes are held by the college for teachers who are preparing themselves as supervisors of art and art specialists, and special grants are given to school boards that employ art specialists as teachers or supervisors of art. Art is further encouraged in the schools by an annual grant of $50 to a school for the purchase of pictures, provided the school board spends an equal amount for the same purpose.

QUEBEC

At a very early period in the history of New France the colonists requested that provision be made for the education of their children. A school for elementary instruction, petite école, was opened, in 1635, at Quebec, by the Jesuits; this school was attended by young Indians, as well as by children of the colonists. In the latter part of the seventeenth century, Bishop Laval, who took a great interest in education, established a school for boys in the outside parishes. One of these had a model farm connected with it, where the boys spent part of their time in farm work and various mechanical trades.

About the same time members of the Sulpician Order opened a school for boys at Montreal, and early in the eighteenth century, schools of the Hospitallers, or Hospital Brothers, were established in the Montreal district. Education for girls was undertaken by the Ursuline community, in 1639, and, at a later period, by the Sisters of the Congregation. In all these schools great attention was given to instruction in religion, and the general subjects of study were reading, writing, and arithmetic, with, in some cases, the elements of Latin for boys. Provision was also made for more advanced education at the Jesuit

College at Quebec, established about 1637, and at the Little Seminary of Quebec, founded by Laval in 1668.

The conquest of Canada, in 1763, produced much confusion in the colony, and retarded for a time the progress of education. By the Quebec Act of 1774, certain restrictions were removed, and in 1791, an education committee composed of members of the legislature, was established to make inquiries into educational conditions. By the French, however, the suggestions of the committee were not favourably regarded.

By an Act of 1801, the Royal Institution for the Advancement of Learning was brought into existence, chiefly through the influence of Dr. Jacob Mountain, the first Anglican Bishop of Quebec, who became its first president. This institution was granted extensive powers in the administration of educational affairs, but by the French it was looked upon as an attempt to establish an educational monopoly for the Church of England.

Towards the end of the eighteenth century, settlements of English-speaking people began to be made in the part of Lower Canada known as the Eastern Townships. These settlers came mostly from the adjoining New England States, and were attracted by liberal grants of crown lands and the fertility of the soil. Coming from States where fairly good schools existed, they at once gave attention to providing means of education, and elementary schools were organized wherever there were fifteen or twenty children in a community. These were supplemented by schools for secondary instruction, such as Stanstead Academy, which was opened in 1830.

The power of the Royal Institution was curtailed by the legislation of 1824, which authorized the founding of parish schools by the French clergy. A subsequent law, in 1829, provided for the election of a board of five

trustees for each school district, and for the apportionment of liberal grants for public instruction.

In 1836, the legislature appropriated funds to create two normal schools, one at Montreal, and one at Quebec. They were to be non-sectarian and open to students of both nationalities. One was opened at Montreal in 1837, and continued in operation till 1842, when the law that authorized their foundation was repealed. The failure of this attempt, as of other attempts, to encourage the fusion of the two races, was due, according to Abbé Desrosiers, to the "masterly inactivity or spirited protest with which the Canadians of Quebec have met every effort at assimilation."

In 1841, a Department of Education was created, with a general superintendent at its head, and, in 1842, Dr. J. B. Meilleur became the first Superintendent for the Province.

By an Act of 1846, public instruction was made free, and the school commissioners for each district were empowered to levy upon all real estate a tax not less than the government grants, for the support of schools in the district. By the same Act two boards of examiners—a Roman Catholic and a Protestant—were established at Quebec and at Montreal, with power to examine teachers and grant certificates. The number of these boards was subsequently increased, and the systematic inspection of schools was instituted.

The legislation of 1846 settled the educational system of the Province practically as it exists to-day. The religious convictions of the people were protected by provision for dissentient, or separate, schools, with a right to share in the government grants. Separate normal schools—two Roman Catholic and one Protestant—were established in 1857, for the preparation of Roman

Catholic and Protestant teachers respectively. This right of minorities to control their own denominational schools and to receive a proper proportion of taxes and government aid was subsequently guaranteed by the British North America Act of 1867.

An enactment of 1859 created a Council of Public Instruction, composed of both Roman Catholic and Protestant members. This Council was afterwards divided into two committees—a Roman Catholic and a Protestant. At first, the findings of each committee were subject to the approval of the whole Council; but, in 1875, the committees were made independent of each other.

Through the liberality of James McGill, a merchant of Montreal, who, in 1813, bequeathed land and money to found a college, McGill University was established at Montreal in 1829. Laval University was founded at Quebec in 1852, and named in honour of the great bishop who had done so much for education in the early days.

McGill University had for several years a hard struggle for existence, but this ceased with the appointment of Dr. J. W. Dawson (Sir William) as Principal, in 1855. During the course of his long and able administration, the University received large endowments from public-spirited citizens of Montreal. Among the most liberal benefactors of McGill University in recent years is Sir William Macdonald, who, in addition to his benefactions to McGill, established and endowed the Macdonald Agricultural College, located at Ste. Anne de Bellevue, twenty miles from Montreal.

In 1907, McGill Normal School (Protestant), which was opened at Montreal, 1857, became part of Macdonald College, as the School for Teachers. Associated

with the College also is a School of Household Science. There are very fine technical schools in Montreal and Quebec, and in many parts of the Province instruction in manual training is provided as a preparation for industrial careers.

NOVA SCOTIA

For many years after Acadia came under the control of England, English rule was made precarious, owing to wars with France; and the country was in too disturbed a state to attract settlers or to allow of much attention being given to education. After the expulsion of the Acadians, the vacant lands were offered as an attraction to settlers from the New England States, and, about 1760 and for some years afterwards, a number of them settled in the Annapolis Valley and adjoining districts. More rapid settlement followed the close of the American Revolution, the chief settlers being United Empire Loyalists in the west, English and Irish in the centre, and Scotch in the east.

The early settlers' views of education were naturally coloured by their experiences in their own country, and this was especially true of the colonists of Scottish origin in the eastern districts. It was not unusual in many of these elementary schools, as in the parish schools of Scotland, for a pupil to receive an education that fitted him for college. That the schools were able to do this work was due largely to the early establishment of colleges, whose students often added to their income by teaching, and were ambitious to have classes in Latin and other subjects required for admission to college.

King's College, at Windsor, was incorporated in 1789, as an Anglican institution, and an Act of 1811 provided for the establishment of grammar schools in several coun-

ties and districts. This was the origin of the county academies, the name by which the secondary schools of Nova Scotia are still known. Perhaps the best known of these, because of the distinction gained by many of its students, is Pictou Academy. This school at one time aspired to the dignity of a university; but the government refused it the power to confer degrees. Dalhousie College, at Halifax, was opened in 1838, and in the same year Acadia College, at Wolfville, was founded by the Baptists. There are two Roman Catholic universities—St. Francis Xavier at Antigonish, and St. Mary's at Halifax—and if we add Mount Allison University, a Methodist institution just across the boundary line, in New Brunswick, which for many years received a grant from the Nova Scotia Parliament, we find that Nova Scotia is in the unique position of having one university for about every 77,000 of the population. An attempt was made to unify the university system by establishing the University of Halifax, with sole power to confer degrees; but, as some of the universities would not surrender their degree-conferring powers, the attempt failed, and in 1881, all government grants to denominational colleges were withdrawn.

In 1830, J. W. Dawson, who later became Principal of McGill University, was made the first Superintendent of Education and did much to advance the educational interests of the Province during the few years he held office.

A normal school at Truro was opened in 1855, under the principalship of the Rev. Alexander Forrester, who was also the second Superintendent of Education. In 1864, both elementary and secondary schools were made completely free, and the school system was organized on what is practically its present basis.

The schools derive their support from government

grants, assessments on the school sections, and grants from municipal school funds. Provincial education is administered by a Council of Public Instruction, of which the Superintendent is secretary, and this Council is assisted by an Advisory Council of Education. There is a Technical College at Halifax, and a College of Agriculture at Truro, in affiliation with the provincial Normal School.

NEW BRUNSWICK

The first general educational movement in New Brunswick brought about the establishment of a college at Fredericton in 1800, which afterwards developed into the University of New Brunswick. This was due in large measure to the influence of the Loyalists who settled in the colony at the close of the American Revolution, and who came from States of the Union which recognized that to be really efficient, a system of elementary education must be supplemented by secondary schools and colleges.

An Act of 1816 provided for the establishment of a grammar school in each county, and for the appointment of local school trustees. The monitorial system of teaching, known also as the Madras system, because it was introduced into England from Madras, India, was in vogue in New Brunswick for about a quarter of a century, after 1820.

In 1847, an Act was passed making the Governor and the members of the Executive Council a Board of Education for the Province; and in 1852, the first Superintendent of Education was appointed in the person of Dr. Theodore H. Rand, who had held the same office in Nova Scotia. Inspectors of schools were also appointed, and normal schools opened at St. John, Fredericton, and Chatham; but, in 1870, the two latter were closed.

By an Act of 1871, a free non-sectarian system of schools was established. These schools are supported by government grants, county assessments, and local assessments in the school districts.

New Brunswick has instituted consolidated schools, where, in addition to the ordinary school subjects, provision is made for instruction in manual training, household science, and agriculture. The teaching of these subjects is, however, not confined to the consolidated schools. Another instance of its progressive educational legislation is the adoption, in 1910, of a liberal pension scheme for teachers.

PRINCE EDWARD ISLAND

Although there were schools in Prince Edward Island before 1825, systematic education in the Island may be said to have begun with the passing of the Education Act of that year. By the Free Education Act passed in 1852, nearly the whole of the teachers' salaries were to be paid by the government. In 1856, the Normal School, and in 1860 the Prince of Wales College, were established in Charlottetown. These two institutions were amalgamated in 1879.

The present system of education is based upon the Public Schools Act of 1877. The schools are under the control of a Board of Education, which is composed of the members of the Executive Council, with the chief Superintendent of Education as secretary and administrative officer. The Principal of the Prince of Wales College and Normal School is also a member of the Board. The salaries of the teachers are paid mainly by the government, which, indeed, furnishes more than eighty per cent. of the total cost of school maintenance.

MANITOBA

In the vast district out of which have been formed the three provinces of the Middle West, the missionaries of the Roman Catholic Church organized the first schools about the year 1818. One of these, established at St. Boniface, by Bishop Provencher, acquired the dignity of a college at an early date.

The first school among the settlers brought into the country by Lord Selkirk was organized in 1820. Other schools soon followed, and, in 1849, a school was established at Kildonan, which developed into Manitoba College, founded in 1871. In the same year, an Education Act was passed, by which a system of schools was established under a Board of Education, consisting of a Protestant and a Roman Catholic section. In 1882, a high school was organized at Winnipeg, and professional instruction for teachers was provided at St. Boniface College. This was followed by a normal school at Winnipeg, about the same date.

An Act of 1890 created a Department of Education, which consisted of the Executive Council, one member of which acted as head of the Department, and had the title of Minister of Education. At the same time an Advisory Board was created with authority to regulate courses of study, and the selection of text-books, and to determine the qualifications of teachers and the appointment of examiners. The Act also provided for free non-sectarian public schools, with a conscience clause which allowed freedom in holding and attending religious exercises. This provision of the Act gave rise to a controversy that stimulated interest in educational matters but led also to considerable litigation, which has resulted in certain changes in the mode of conducting religious instruction in the schools. The great influx of foreign immigrants

has further complicated the educational situation in Manitoba, which has before it the problem of assimilating and moulding into patriotic Canadians the various races that comprise its population.

Manitoba has been more successful than any of the other provinces in establishing consolidated schools. Manual training, household science, and school gardening are subjects of study in many town and district schools, and commercial courses are provided in many secondary schools. Technical and industrial education is well provided for, especially in Winnipeg. An Agricultural College was established at Winnipeg in 1903.

In 1907, the administration of educational affairs, which had been conducted, since 1890, by a Minister holding another portfolio, was assigned to a member of the Cabinet with a separate portfolio, as Minister of Education.

SASKATCHEWAN AND ALBERTA

The North-West Territorial Act of 1875 provided for the orderly government of the North-West Territories, in which was included the district that, in 1905, became incorporated into the Provinces of Saskatchewan and Alberta.

The educational clause of this Act made provision for the organization of schools, but it was not till 1884 that a system of elementary schools was established, and regular school districts formed. At the same time a Board of Education composed of two sections—a Protestant and a Roman Catholic—was created. Grants in aid of education in the Territories were made by the Dominion Parliament. When the Provinces were organized in 1905, there were over 900 schools in operation in the whole district known as the North-West Territories.

In Saskatchewan, there are normal schools at Regina and Saskatoon, and instruction in professional methods for third class teachers is given in different centres. The Secondary Education Act of 1907 made special provision for the establishment of high schools.

The first normal school in Alberta was established at Calgary in 1905, and was followed by one at Camrose in 1912. Provision has been made for agriculture in the courses of study, and agricultural schools are being established. A Director of Technical Education for Alberta was appointed in 1911. Each of the provinces has a university in full operation, the University of Saskatchewan, at Saskatoon, and the University of Alberta at Edmonton.

The problem of assimilating the many nationalities represented in the great flow of immigrants that have made their way into all parts of these Provinces in recent years, is a serious one. The problem is made all the more difficult through the grouping of various races into separate colonies, and the necessity of adapting the school system to meet their immediate requirements, while basing it upon the broad policy of training the people for Canadian citizenship.

BRITISH COLUMBIA

The first schools in British Columbia were organized on Vancouver Island by the Hudson's Bay Company, about the middle of the nineteenth century. In 1865, the Island, which was then a separate colony, passed an Act providing for a board of education, to have general supervision of educational affairs, with the supreme authority vested in the governor of the colony. Subject to the approval of the governor, the board had power to form school districts and to prescribe the courses of study and the text-books to be used; the gover-

nor was empowered to appoint local boards of education and to select as teachers such persons as he might deem fit. The schools were to be free and non-sectarian, and the cost of maintaining them was to be met by the general board of education from the grants made by the legislature.

In 1866, Vancouver Island and British Columbia were merged into the colony of British Columbia, and, in 1869, an Act of the British Columbia Legislature repealed the Vancouver Act of 1865, and substituted a system of education that was less centralized. This Act provided for non-sectarian schools throughout British Columbia, but not for free schools. The tendency of subsequent school acts has been to give local authorities more and more control over educational affairs, and to place upon the municipalities and school districts an increasing proportion of the cost of education.

In 1870, British Columbia entered the Confederation of provinces which formed the Dominion of Canada, and, in 1872, an Act was passed which made the schools free. By this Act provision was made for examining teachers and granting certificates, for the election of school trustees in each district, and for the appointment of a board of education, with a superintendent of education as its chairman. By the Public School Act of 1879, which is virtually the Act under which the schools are now governed, the duties that had been performed by the board of education were transferred to the superintendent of education, and the board ceased to exist.

Provision for the professional training of teachers was made by the establishment of a normal school at Vancouver in 1901, and at Victoria in 1915. A free textbook system was adopted in 1908.

The Royal Institution of Learning of British Columbia was incorporated in 1906, and was granted power to establish examinations in connection with McGill University, Montreal. A movement has been on foot for several years to complete the establishment of a University of British Columbia, for which an act of incorporation was passed in 1908. It is to be located at Point Grey, near Vancouver, and, when completed, will have in affiliation with it a College of Agriculture and various other institutions required to meet the demands of a Province that is remarkable for the richness of its material resources.

APPENDIX

Suggested Readings from Books of Reference

CHAPTER II

Monroe.....Text-book on the History of Education. Chap. I.

CHAPTER III

Monroe.....Text-book on the History of Education. Chap. II.

CHAPTERS IV AND V

Monroe.....Text-book on the History of Education. Chap. III.

CHAPTER VI

Monroe.....Text-book on the History of Education. Chap. IV.

CHAPTER VII

Monroe.....Text-book on the History of Education. Chap. V.

CHAPTER VIII

Monroe.....Text-book on the History of Education. Chap. V.

CHAPTER IX

Monroe.....Text-book on the History of Education. Chap. V.

CHAPTER X

Monroe.....Text-book on the History of Education. Chap. V.

CHAPTER XI

Monroe.....Text-book on the History of Education. Chap. VI.
Quick.....Educational Reformers. Chaps. I. II.

CHAPTER XII

Monroe.....Text-book on the History of Education. Chap. VII.
Quick.....Educational Reformers. Chaps. III, IV, VI.

CHAPTER XIII

Monroe.....Text-book on the History of Education. Chaps. VIII, IX.
Quick.....Educational Reformers. Chaps. IX, X, XIII.

CHAPTER XIV

Rousseau

Monroe.....A Brief Course in the History of Education. Chap. X.
Quick.....Educational Reformers. Chap. XIV.
Halleck.....Education of the Central Nervous System. Chap. VIII.
Kemp.....History of Education. Chap. XXII.

CHAPTER XV

Pestalozzi

Monroe.....A Brief Course in the History of Education. Chap. XI.
Quick.....Educational Reformers. Chap. XVI.
Kemp.....History of Education. Chap. XXV.
Halleck.....Education of the Central Nervous System. Chaps. VIII, X.

Herbart

Monroe.....A Brief Course in the History of Education. Chap. XI.
Kemp.....History of Education. Chap. XXV.
James.....Talks to Teachers. Chaps. X, XIV, XV.
Bagley.....The Educative Process. Chap. IV.
Thorndike....Principles of Teaching. Chap. IV.

Froebel

Monroe.....A Brief Course in the History of Education. Chap. XI.
Quick.....Educational Reformers. Chap. XVII.
Kemp.....History of Education. Chap. XXV.
Halleck.....Education of the Central Nervous System. Chaps. VIII, XI.
Thorndike....Principles of Teaching. Chaps. XIII, XIV.
Kirkpatrick...Fundamentals of Child Study. Chaps. IX, XIII.

CHAPTER XVI

Herbert Spencer

Monroe.....A Brief Course in the History of Education. Chap. XII.
Quick.....Educational Reformers. Chap. XIX.
Bagley.....The Educative Process. Chap. III.

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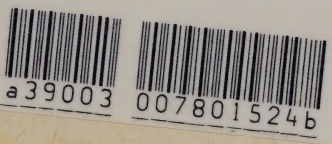
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